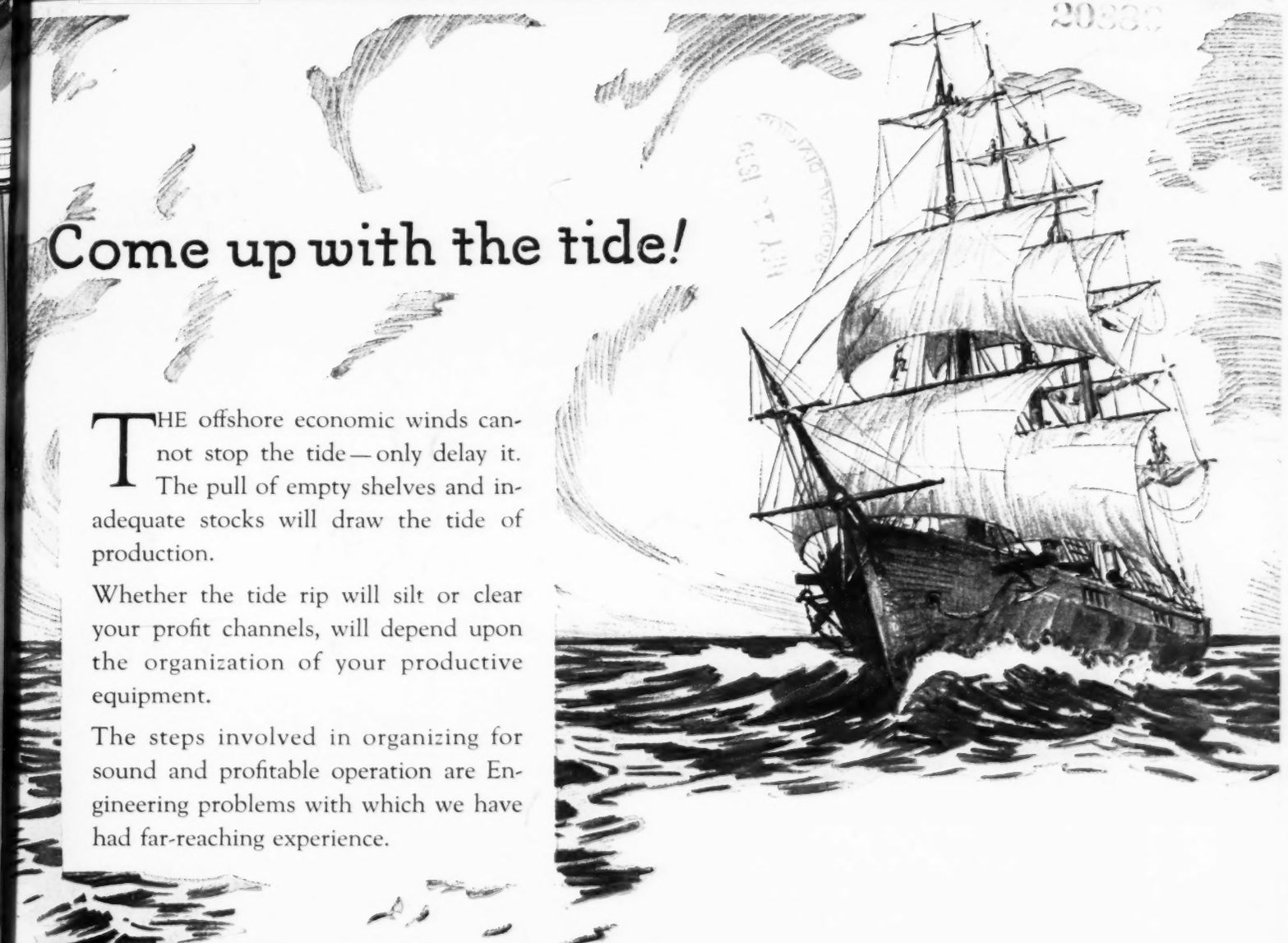
COTTON
VING THE
MAY 1938
Textile Industries



Come up with the tide!

THE offshore economic winds cannot stop the tide—only delay it. The pull of empty shelves and inadequate stocks will draw the tide of production.

Whether the tide rip will silt or clear your profit channels, will depend upon the organization of your productive equipment.

The steps involved in organizing for sound and profitable operation are Engineering problems with which we have had far-reaching experience.

J. E. SIRRINE & COMPANY

Engineers

Greenville **South Carolina**

Textile Mills
Rayon Mills
Power Application
Production Studies
Reorganization

Paper Mills
Tobacco Factories
Power Plants
Water Supply
Industrial Plants

FOR **KNITTED FABRICS** LIKE THESE
LET US SUPPLY EXPERIENCE AS WELL AS COLORED YARNS - - - IT'S FAR LESS EXPENSIVE THAN TRIAL AND ERROR

Since the quality of the color in a fabric often holds the balance of power in making a sale or in creating good will after the sale, it behooves the fabric manufacturer to give careful consideration to the qualifications of his dyer.

Being the largest custom yarn dyers in the world Franklin Process plants naturally have had an unequalled wealth and variety of yarn dyeing experience. This experience can be utilized with profit by all mills using colored yarns, and particularly by mills making knitted fabrics like those illustrated where colors and white are mixed or adjacent. Here the problem is to get serviceable colors at a price that will satisfy merchandising requirements.

Many mills have found by bitter experience that any old color won't do, that even just a particular type of color won't do. Rather it's a matter of individual dyestuff selection based on laboratory tests and of a special finish to assure proper fastness. Franklin Process resources plus practical lessons learned in the past permit a scientific approach to this problem. Hence purchasers of Franklin Process Colored Yarns also buy, at no extra charge, a ready made experience and completely eliminate the hazards of trial and error.

Tell us your colored yarn problem and let us make recommendations.

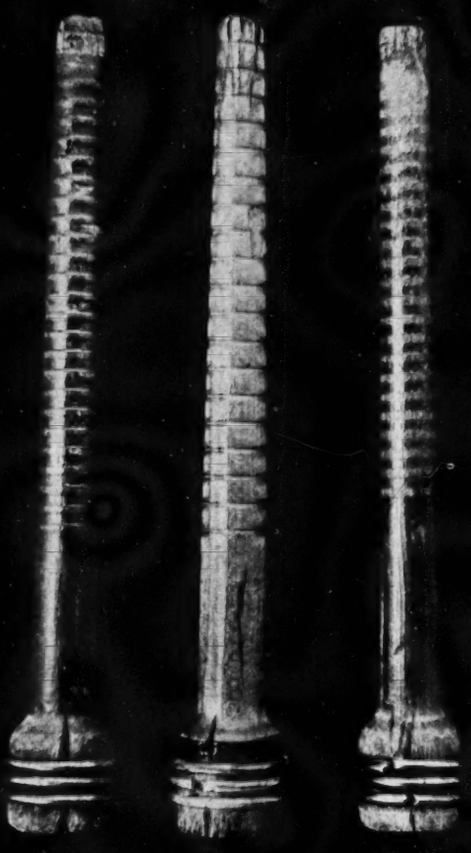
Franklin Process

Natural Yarns Colored Yarns *Glazed Yarns*
Dyeing and Processing Machines
PROVIDENCE • PHILADELPHIA • GREENVILLE
CHATTANOOGA
NEW YORK REPRESENTATIVE, 40 Worth Street

GARMENTS BY WATERVILLE TEXTILE MILLS, WATERVILLE, N. Y.

SPECIALISTS IN PACKAGE DYEING SINCE 1910

COTTON is published monthly by W. R. C. Smith Publishing Company, Dalton and Atlanta, Ga.
Subscription Rates, United States and Possessions, $1.00 for one year; $2.00 for three years; Canada, $1.50 per year; Foreign Countries, $2.00 per year.
Entered as second-class matter at the Post Office, Dalton, Ga., under the Act of Congress of March 3, 1879.



Why Continue to Run Bobbins Like These?

Even in These Hard Times
There is Neither
Economy nor Profit
in Trying to
Save Every Cent
When It is at the Expense of the Quality and Quantity of Your Product

Give Your Looms a Chance with Good Bobbins

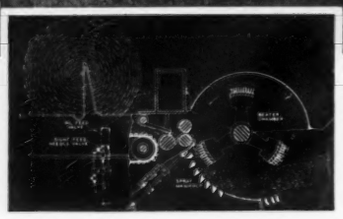
We Make Bobbins to Suit Your Needs

DRAPER CORPORATION

Atlanta Georgia Hopedale Massachusetts Spartanburg S C

Cotton Conditioned *Here*

. . . More Long, Usable Fibres!



Uniform distribution is the key to successful cotton conditioning. Note where the compound is applied in the Texspray System . . . just where the fibres spread out fan-wise, so that each fibre can be thoroughly sprayed.

THE PLACE TO CONDITION your cotton is in the beater chamber of the picker. Here the cotton is clean—free from dirt, trash, leaves—yet loose and fluffy. Here, each fibre is exposed to uniform application of the Texspray Compound. This point of application is the distinctive and exclusive feature of the Texspray System.

From cotton conditioned with Texaco Texspray, you get a smoother, better-looking yarn, containing a greater percentage of soft, flexible fibres that don't break and are easier to draft.

Cotton mill operators have learned that the saving of stock alone more than pays for the cost of conditioning. Moreover, the Texspray System makes healthier working conditions because it practically eliminates fly and dust in the card room.

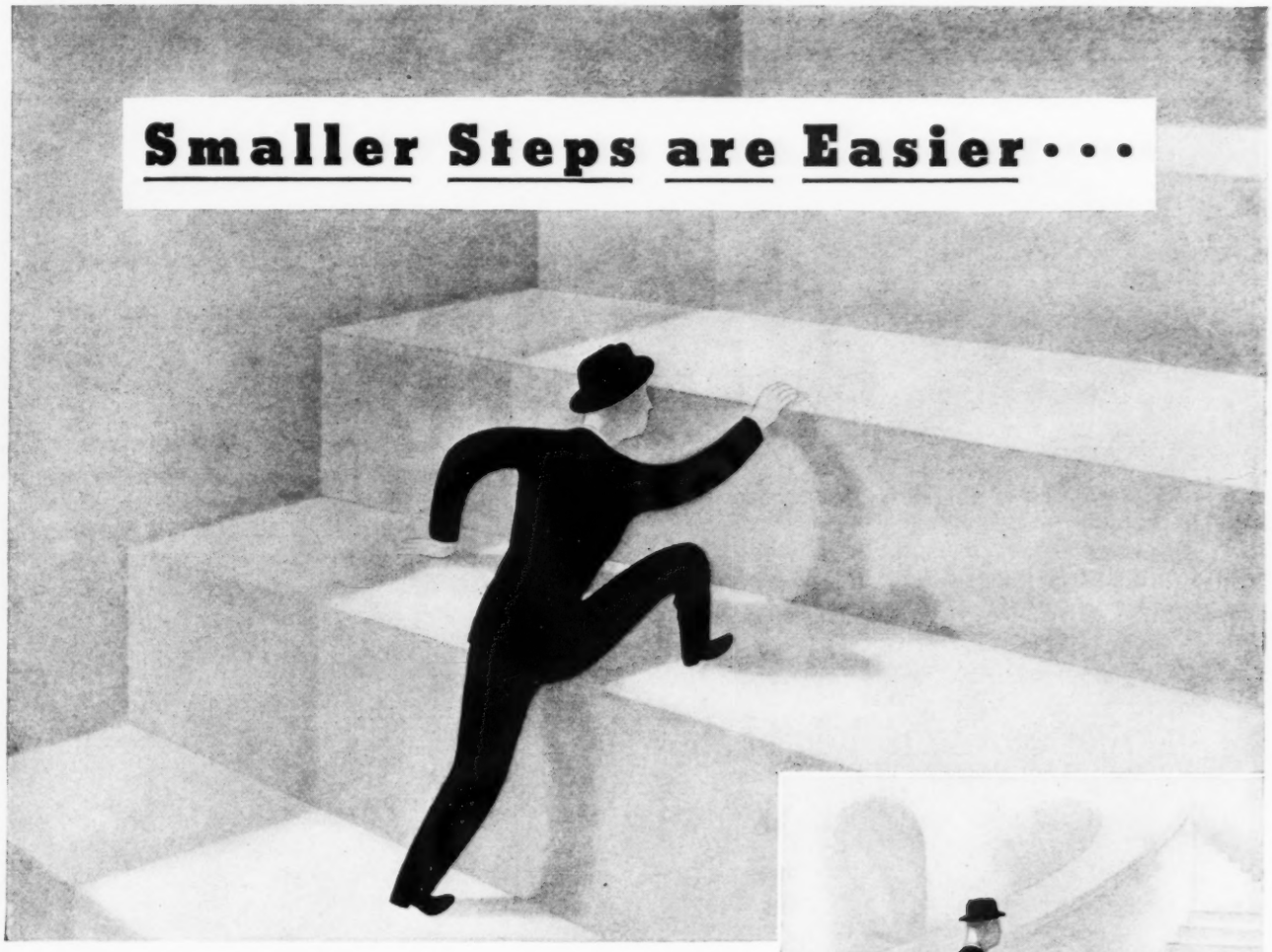
Texaco Texspray Compound and the equipment for applying it are available in cotton manufacturing centers throughout the U. S. The Texas Company, 135 E. 42nd St., New York City.

SEND FOR THIS FREE BOOKLET. *16 pages, illustrated, describing cotton conditioning and its advantages. Interesting and helpful to the cotton man who wants to improve working conditions and quality of yarn.*

TEXACO REG. T. M.

Cotton Conditioning WITH

TEXACO TEXSPRAY Compound



Apply this principle to your LOOM REPLACEMENT PROGRAM

There is an amazing degree of obsolescence in the textile industry! Even if there had been *no* improvements in loom design, over one-half would need replacing from sheer *old age.*

But there have been improvements in loom design. Definite improvements, *that make eight out of every ten looms candidates for replacement!*

If this is the condition of your mill, we suggest that you earmark 10% of your worst equipment for replacement this year. Do the same next year, and the year after, until in ten years you have completely rehabilitated your mill.

You do not have to wait for peak years to replace—take it in smaller steps—they're easier!

The greatest immediate benefits from a replacement program come from starting with looms that make the poorest showing. These looms are not always readily apparent. C&K engineers can be of much help in ferreting them out . . . write to us.

CROMPTON & KNOWLES LOOM WORKS

ALLENTOWN, PA. PHILADELPHIA, PA. CHARLOTTE, N. C. **WORCESTER** CROMPTON & KNOWLES JACQUARD & SUPPLY CO., PAWTUCKET, R. I.

L. F. Dommerich & Company

Executive and General Offices

271 MADISON AVENUE

NEW YORK, N. Y.

Telephone: AShland 4-8650

FACTORS

For Manufacturers and Merchants

Inquiries as to our services solicited

●

ESTABLISHED 1840

The Cost Sheets of 100 MILLS

TELL US INTERESTING STORIES OF ECONOMIES

SUPER-DRAFT ROVING FRAMES

WHETHER you replace older Roving with newly equipped frames, or apply the Whitin Long Draft Systems to machines now in place...

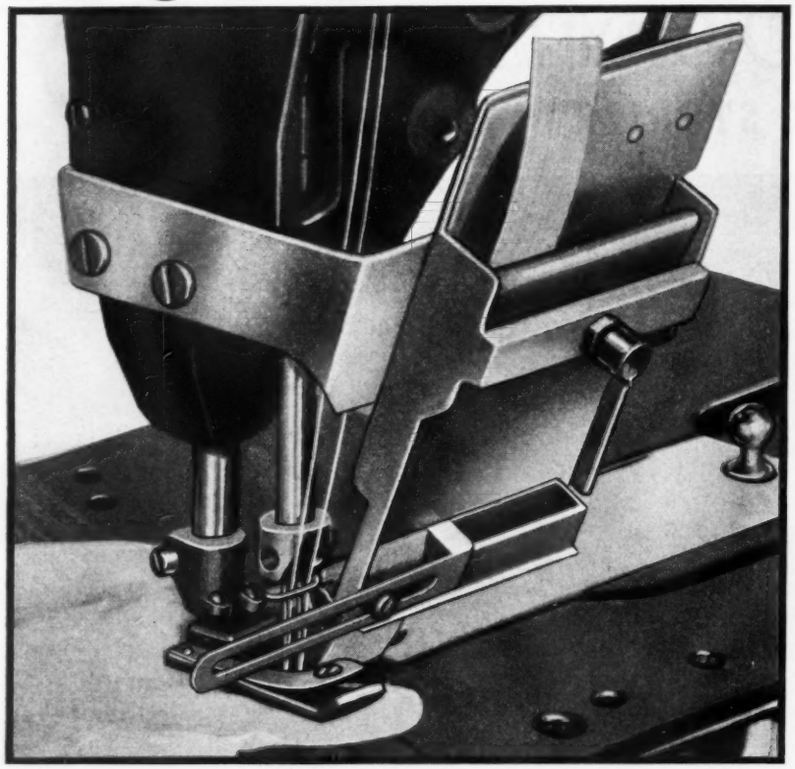
Your yarn costs are reduced, and your quality improved.

WHITIN MACHINE WORKS

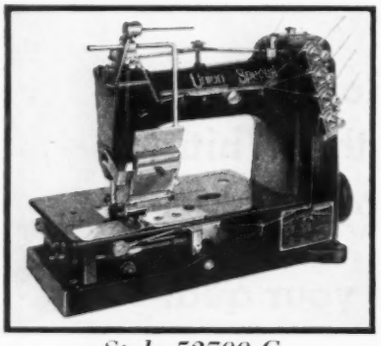
WHITINSVILLE, MASSACHUSETTS

CHARLOTTE, N. C. ATLANTA, GA.

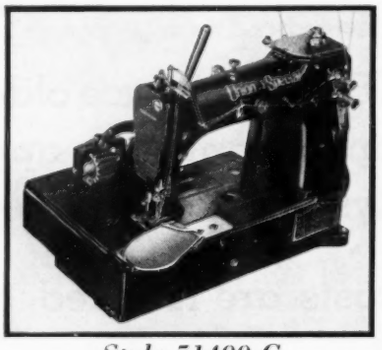
MODERN METHODS *for attaching* ELASTIC



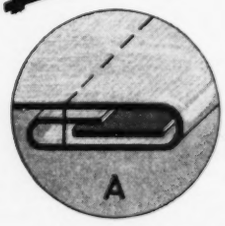
MODERN high speed sewing machines, nowhere, pay greater dividends than in the attaching of elastic finishes. And nowhere will you find more modern equipment for this work than in Union Special's new line. A few of these units are mentioned here. For specific recommendations, send us samples of the elastic work you are doing and we will tell you what can be done with the latest machines. UNION SPECIAL MACHINE CO., 438 North Franklin Street, Chicago, Illinois.



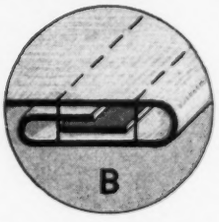
Style 52700 G



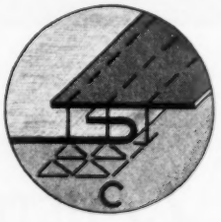
Style 51400 G



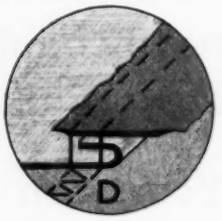
A—This neat, simple method of inserting elastic in a hem is classed as an EFf-1 seam. It can be produced on a Union Special *Fifty-One-Two* machine.



B—The two-needle *Style 51400 G* machine with puller produces this type EFg-2 seam with the elastic inserted in the hem—a very popular finish!



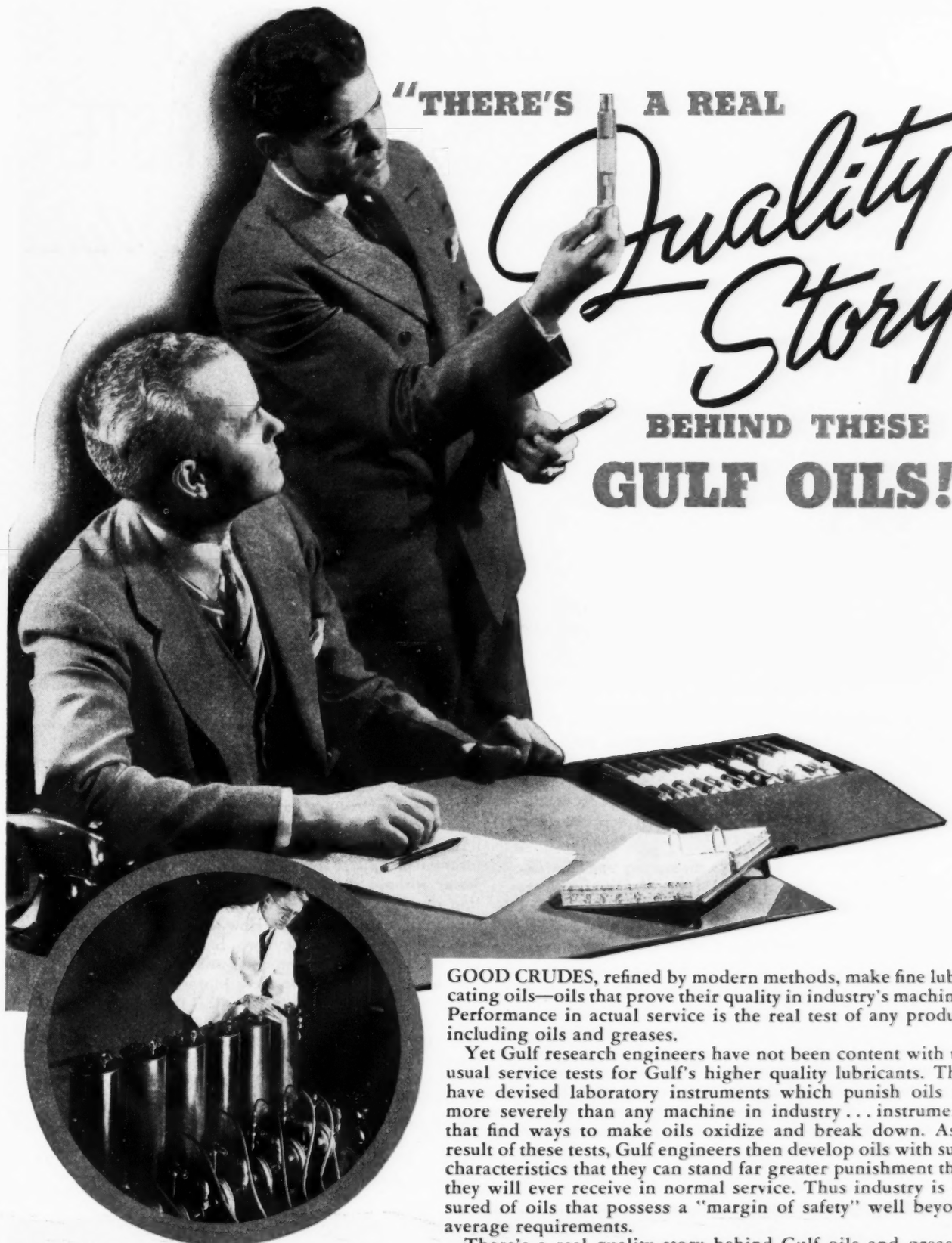
C—The three-needle *Style 52700 G* is widely used for attaching elastic banding with the dependable 407-LSb-1 (inverted) seam. 1/8" space between needles.



D—The attractive frilled elastic finish can be attached very satisfactorily with *Style 52700 H* which produces the two-needle Type 406 stitch.

UNION SPECIAL

"THERE'S A REAL *Quality Story* BEHIND THESE GULF OILS!"



Here is one of the machines Gulf's technical men have devised for testing lubricating oils. The oil, mixed with water, is circulated rapidly through the machine while a stream of oxygen is whipped thoroughly into it. Many oils have been tested with this instrument but none have shown stability equal to Gulf's higher quality oils.

GOOD CRUDES, refined by modern methods, make fine lubricating oils—oils that prove their quality in industry's machines. Performance in actual service is the real test of any product, including oils and greases.

Yet Gulf research engineers have not been content with the usual service tests for Gulf's higher quality lubricants. They have devised laboratory instruments which punish oils far more severely than any machine in industry . . . instruments that find ways to make oils oxidize and break down. As a result of these tests, Gulf engineers then develop oils with such characteristics that they can stand far greater punishment than they will ever receive in normal service. Thus industry is assured of oils that possess a "margin of safety" well beyond average requirements.

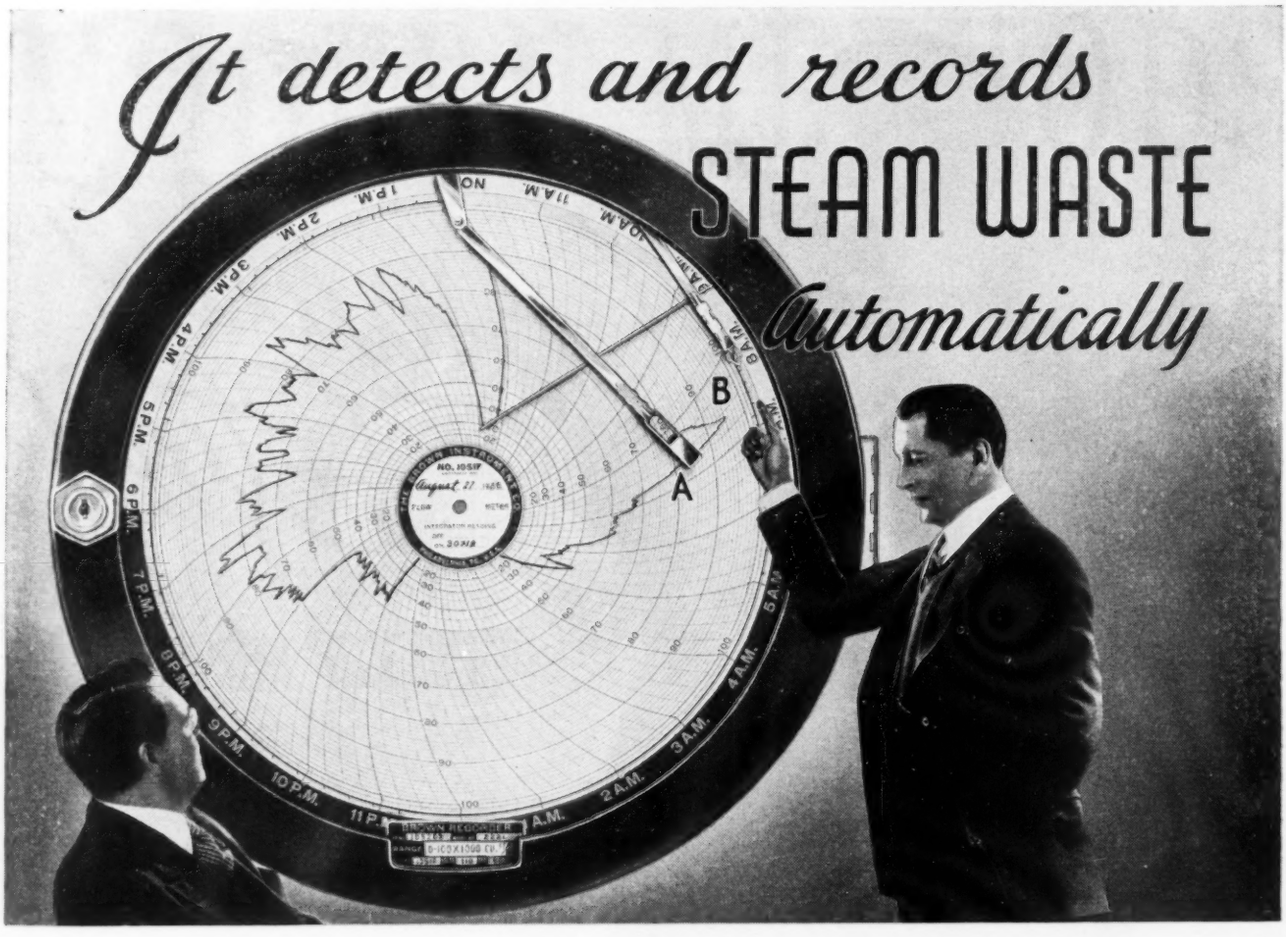
There's a real quality story behind Gulf oils and greases. Let a Gulf engineer demonstrate to you—in your plant—how Gulf's higher quality lubricants provide a greater measure of protection for your machinery—and help you reduce the costs of plant operation.

GULF OIL CORP. • GULF REFINING CO.

GENERAL OFFICES, PITTSBURGH, PA.

GULF INDUSTRIAL LUBRICATION

It detects and records STEAM WASTE *Automatically*



HIDDEN steam leaks may be running into thousands of dollars in your plant unless the steam you use in each department is separately recorded.

The dual record on every Brown Flow Meter chart makes it impossible for this important loss to escape detection. Steam waste is detected and recorded automatically.

With Brown Flow Meters measuring and controlling the flow of steam for Power, Heating or Processing, you are completely protected because the Brown Automatic Recording Planimeter Pen "B", making the marginal record shown on the chart, supplies proof that a definite number of pounds of steam, or gallons of water, cubic feet of gas, or barrels of oil, were delivered, utilized—or wasted.

This is a special, patented feature of the greatest value to flow meter users. Reference to the automatic planimeter pen record on chart rim assists you to distribute departmental or process loads more uniformly over the working day, effecting substantial fuel savings not only in the boiler room, but in every department or unit where steam is used.

The record line "A" shows the rate and records the total amount of steam generated by the boiler. It guides the fireman in maintaining the most efficient boiler operation to meet steam demand.

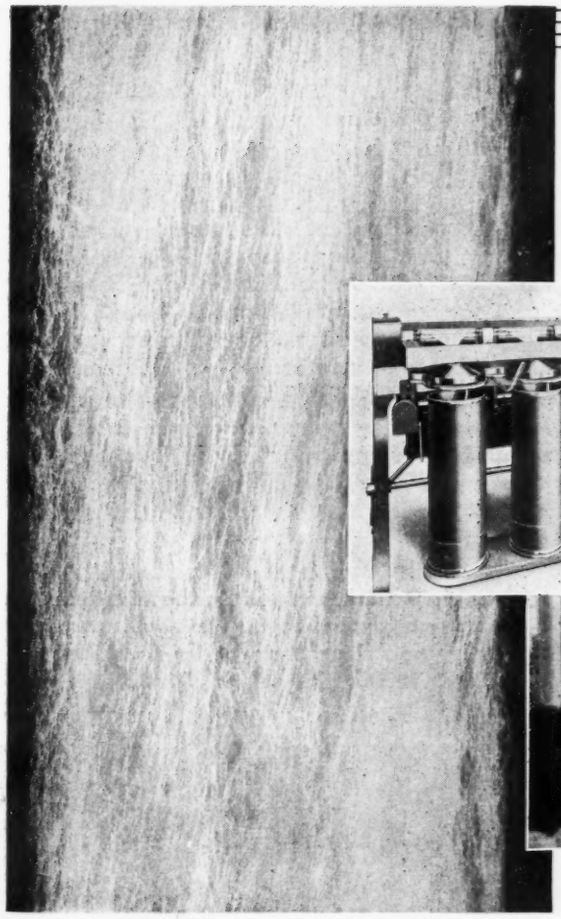
Another exclusive feature of the Brown Flow Meter is the flexibility of six interchangeable range tubes which permits changing the capacity of the flow meters to meet any flow requirement for differential pressures from 20 inches to 200 inches of water without disturbing the orifice plate or shutting down the line.

Learn more about Brown Flow Meters—How they are different—Why they are better—What they can do for you. Our engineers will be glad to discuss with you how Brown Flow Meters can bring to manufacturing processes many of the economies they have effected in power production. Catalog No. 2004 fully describes Brown Electric and Mechanical Flow Meters and Air-O-Line Flow Controllers, write for a copy. THE BROWN INSTRUMENT COMPANY, *a division of Minneapolis-Honeywell Regulator Co.,* 4492 Wayne Avenue, Philadelphia, Pa. Offices in all principal cities. Toronto, Canada: 117 Peter St.—Amsterdam-C, Holland: Wijdesteeg 4—London, England: 70 St. Thomas St., S.E.1.

BROWN FLOW METERS

. . . MINNEAPOLIS - HONEYWELL CONTROL SYSTEMS . . .

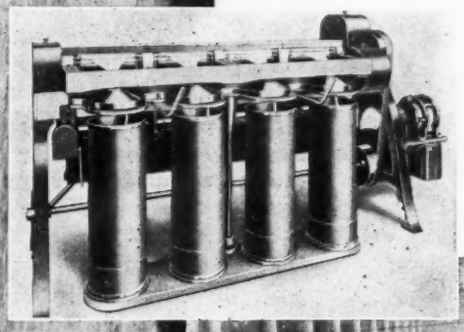
To Measure and Control is to Economize

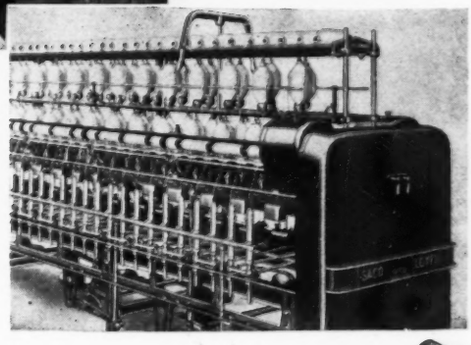


SACO-LOWELL

Unified Fibre Control

DRAWING SLIVER
to
SPINNING BOBBIN
in 3 OPERATIONS





THE Saco-Lowell Controlled Draft Roving Process accomplishes in three operations what formerly required five. By eliminating two roving frames, several substantial savings are effected. Obviously with less equipment there is a saving in power, machinery space, maintenance and operating costs.

But this is only part of the story. Quality, the most important factor of all, is consistently maintained. Roving is smooth, even, and regular; production is generally better; and in addition there is the advantage of continuous, effective control of the fibres during the drafting operation.

Saco-Lowell Controlled Draft Roving has *proved* its performance in some of the better mills throughout the world. We'd like you to have the whole story. A letter or post card will bring you a bulletin giving all the *facts*.

SACO-LOWELL SHOPS

60 BATTERYMARCH STREET, BOSTON, MASSACHUSETTS

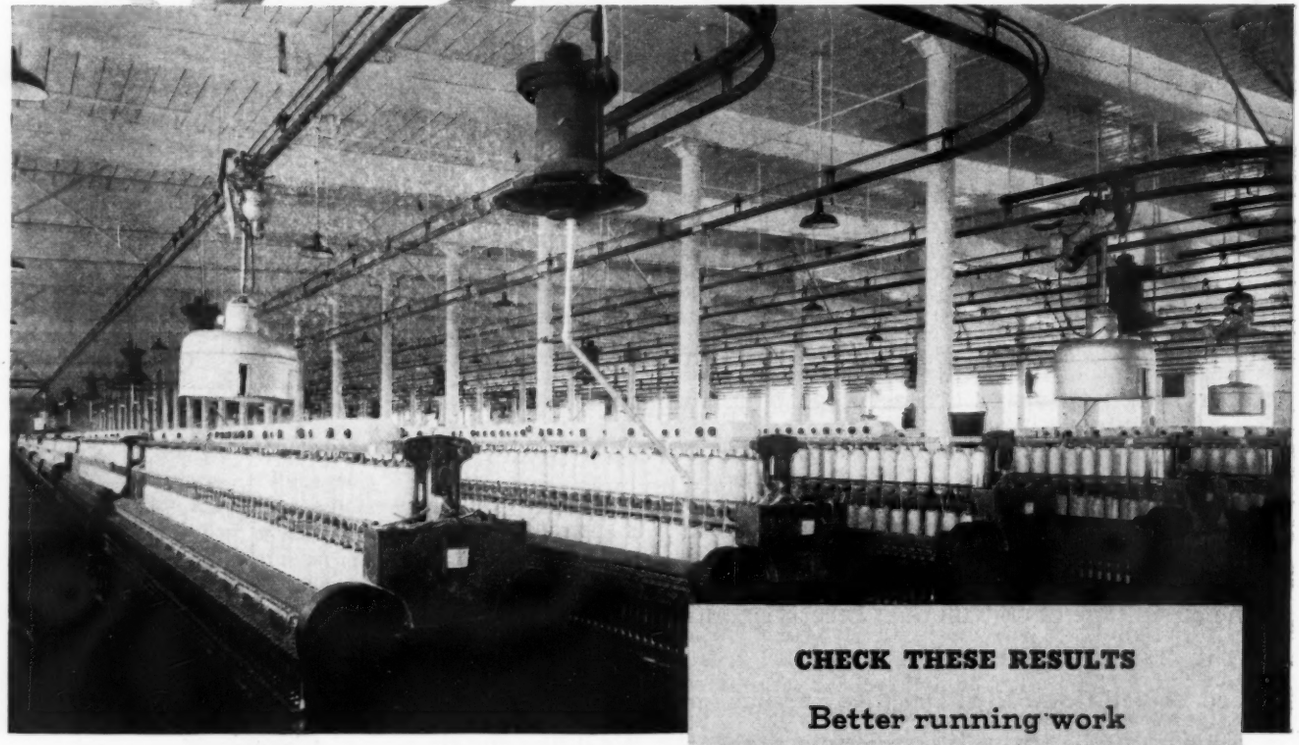
Charlotte, North Carolina . . . . . Greenville, South Carolina . . . . . Atlanta, Georgia

CLEANS WITH A SWIRLING COLUMN OF AIR

ACTUALLY a controlled cyclone with high velocity currents swirling around creel boards and guides removing lint before it can accumulate. Roving is protected against damage yet kept thoroughly clean. No lint is blown from one frame to another. Velocity can be carefully adjusted to meet changing conditions.

Such automatic cleaning relieves your spinners of most cleaning operations and enables them to produce more and better running yarn. Ends-down have been reduced by 53% in some mills, while cleaners over high speed warpers have eliminated 74% of the transfer stoppage.

Experienced textile engineers will explain how easily American MonoRail equipment can be installed. Write for copy of book describing all the advantages of automatic cleaning. Send card to The American MonoRail Company, 13106 Athens Ave., Cleveland, O.

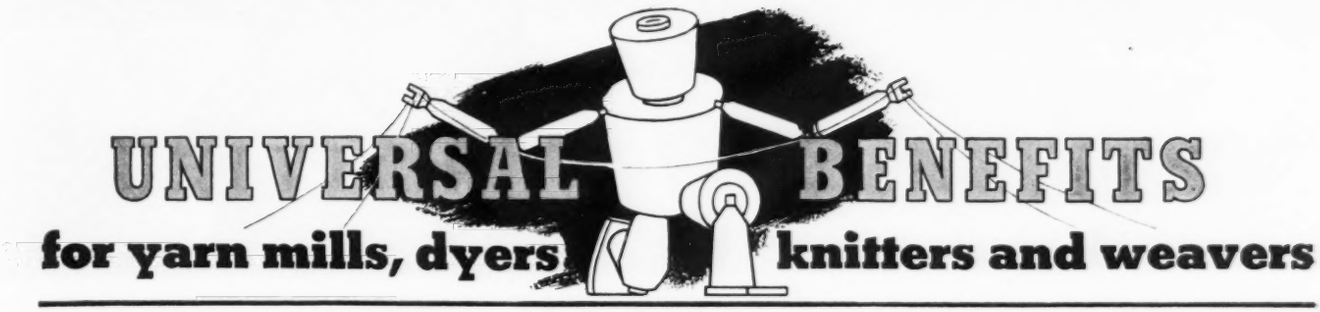


CHECK THESE RESULTS

Better running work
Fewer gouts or bunches
Less ends-down
Spinners handle more sides
Lower cleaning costs
No lost production
Reduced machine stoppage

AMERICAN MONORAIL OVERHEAD CLEANERS

for Spinning, Winding, Spooling, Warping



UNIVERSAL BENEFITS

for yarn mills, dyers knitters and weavers

Roto-Coners Help Yarn Mills Win Satisfied Customers

One-piece combination driving drum and traverse guide

The enthusiastic reception by knitters of packages wound on Roto-Cones is evidence to a large number of yarn mills that their investment in these machines has been a profitable one.

Most of the improvements in cone quality may be traced to the one-piece patented rotating traverse which eliminates slip drums — the chief cause of roll-cut yarn.

The rotating traverse also operates at higher winding speed than reciprocating guide winders — without sacrificing proper lay of yarn on the cone. The yarn is not chafed because the rotating traverse revolves in the same direction the yarn is traveling. The machines are silent in operation because there are no cams, and they are streamlined for easy cleaning.

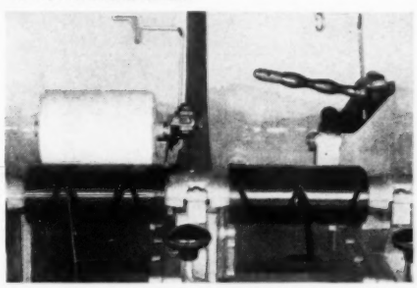
Repair cost is low, because the rotating traverse eliminates quick-wearing parts, and because there are no cams to replace. Oiling of slow moving parts is automatic. Time required for cleaning and greasing cams on each reciprocating-guide winder amounts to several hours a week, and is not necessary on the Roto-Coner.

A large number of the mills operating Roto-Coners have reordered, and several are now 100% equipped.

Write for Bulletin 144.

Freedom from Hard Ends Means Better Penetration of Dye

The groove in the rotating traverse is so formed that the yarn is reversed quickly at the ends of the traverse. The yarn is delivered at the point where the package contacts the drum, so it does not dwell, as on reciprocating-guide winders, to form hard ends.



Special positioning of the package holder on the Roto-Coner also contributes to uniform density — pressure is not added to the inside layers as the package builds up.

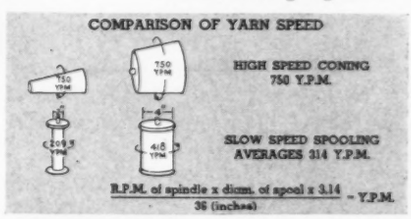
Dyers have told us they have never seen a better package for dyeing — and report excellent results, due to the even penetration of the dye, including the ends of the package, without special preparation.

Winding Fine Yarns Proves Quality of Roto-Cones for Knitting

Fine counts of cotton yarn up to 120/1, are being wound on Roto-Coners, and knitters are reporting excellent results. The rotating traverse greatly reduces strain on the yarn, and the chafing caused by reciprocating guides is eliminated.

Press-offs are reduced, because roll-cut yarn is eliminated. There are no slip drums on the winder to nip the yarn, no sharp metal edges to cut it. The smooth one-piece rotating traverse revolves in the same direction that the yarn is traveling, leaving the yarn strong and round. The whiskers remain part of the yarn, improving its finish. The yarn is cleaner because of the streamlined design and because of efficient double slub catchers which remove imperfections.

The Roto-Coner Produces Better Warping Cones


COMPARISON OF YARN SPEED
750 YPM
HIGH SPEED CONING
750 Y.P.M.
SLOW SPEED SPOOLING
AVERAGES 314 Y.P.M.
R.P.M. of spindle x diam. of spool x 3.14 / 36 (inches) = Y.P.M.

The Roto-Coner, equipped to wind large 4-lb. cones for the warping creel, provides weaving mills with a new opportunity to increase production and lower the total cost of preparing warps for the loom.

Being flexible, it can wind several yarn counts at once without loss of machine efficiency. The winding speed is limited only by the way the yarn comes off the bobbin, and is usually 750 y.p.m., much higher than on other models of Universal winders. Thus, a single 100-spindle Roto-Coner will replace 238 spindles of slow speed spooling.

Investment for new machines is low, and less floor space is required. Maintenance costs have also been reduced to an average of ½ of one per cent of the investment cost.

Of those mills that are now operating slow speed spooling, 3 out of 4 will find that the Universal System offers the greatest net return when replacing slow speed warping.

Weavers are invited to write for Bulletin 244.

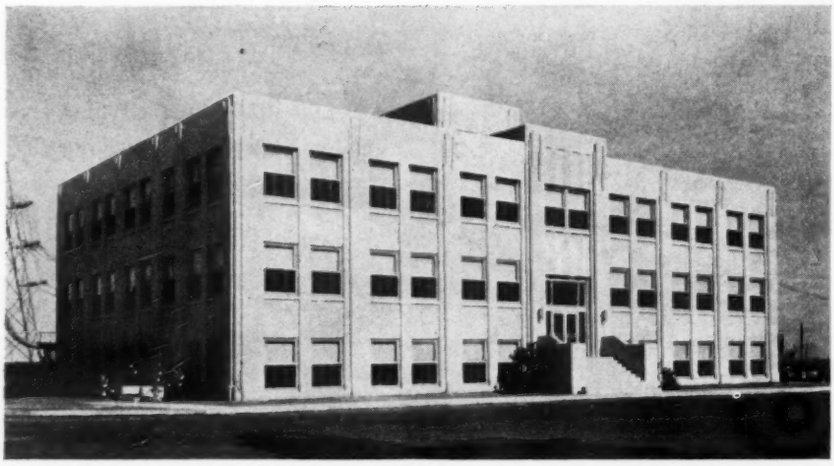
UNIVERSAL WINDING COMPANY

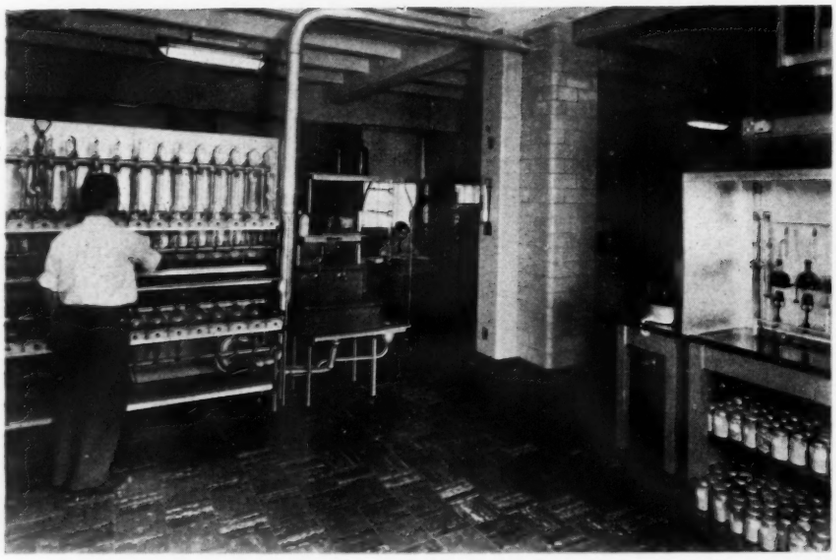
P. O. BOX 1605 PROVIDENCE, R. I.

BOSTON PHILADELPHIA UTICA CHARLOTTE ATLANTA

STALEY

The New STALEY LABORATORIES





Users Of Staley Starches Depend Upon Modern Plant Equipment And Procedure To Provide The Correct Starch For Their Specific Use.

The Heart Of The Plant Is The Completely Equipped Laboratory. Strict Control Of Products And Processes Is Maintained Day and Night In The Interest Of Staley Customers.

A. E. STALEY MAN

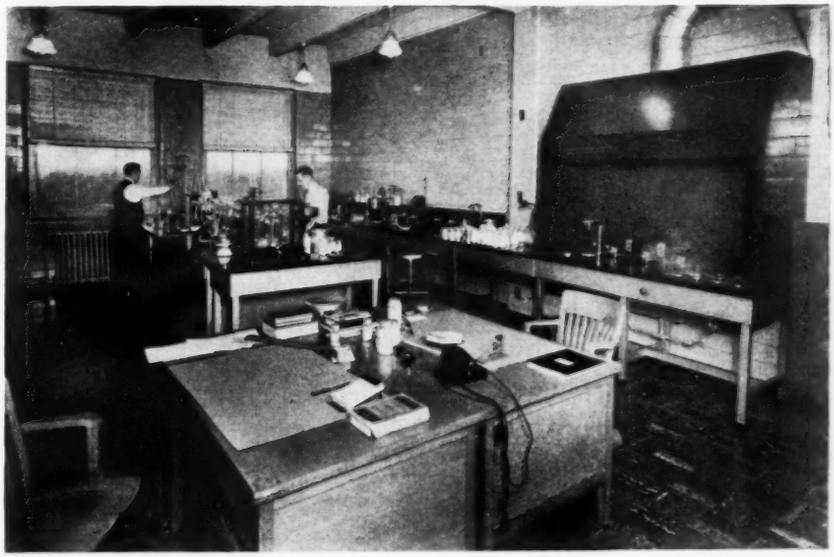
DECATUR,
ATLANTA
PHILADELPHIA
SPARTANBURG
SAN FRANCISCO

STARCHES

Technical Facilities . . . .

Process Control Laboratories, Chemical Engineering Department, Sales Service Department, Research Division, Are All Combined In The New Building.

Up-To-Date Facilities And The Best Trained Personnel In The Heart Of The Staley Plant Are Guarantees Of Good Textile Starches.



UFACTURING CO.

ILLINOIS

DALLAS
CHICAGO

NEW YORK
BOSTON

Belting Isn't My Responsibility

. . . But 2% More Production

Is a Whale of a Lot!

"It says in this ad in COTTON that Research Belting will increase average machine production at least one or two per cent . . . or they return your money.

"I think that's reason enough at least for our Purchasing Department to call in the Graton & Knight salesman. There must be something extra good about their belting or they wouldn't write an ad like that."

THERE is. No other belting leather is given the newly-developed controlled fiber treatment Research Belting receives in the Home of Research. Which is why the new Research Belting can produce such bonuses as:

15 feet an hour extra on spinning frames . . . $2.88 a year extra profit on each of several hundred looms . . . 4% increase in production on woolen cards . . . 6 more picks a minute . . . and so on.

To you . . . we guarantee that Research Belting will increase average machine production at least 1 or 2% over ordinary belting, or the purchase price will be returned. You will find the nearest office or distributor in the Graton & Knight insert in the belting section of 1938 Thomas' Register.

Why not call today to get Research Belting on one of your important drives where the increased production can be measured?

MODERN PTG GROUP DRIVE

Graton and Knight

RESEARCH BELTING

from the Home of Research, Worcester, Mass.

WRITE FOR OUR HOME OF RESEARCH BOOK ON ECONOMICAL POWER TRANSMISSION

Eliminate Bad Selvage

With West Point Loom Beams

WEST POINT LOOM BEAMS make possible continuous and quality production in the weave room, and the elimination of bad selvage! Here's why:

These beams run true! The heads are equidistant at all points! Therefore, an even amount of yarn winds on the beams at all sides! *Thus no high and low places at the edge of the warp with consequent bad selvage!*

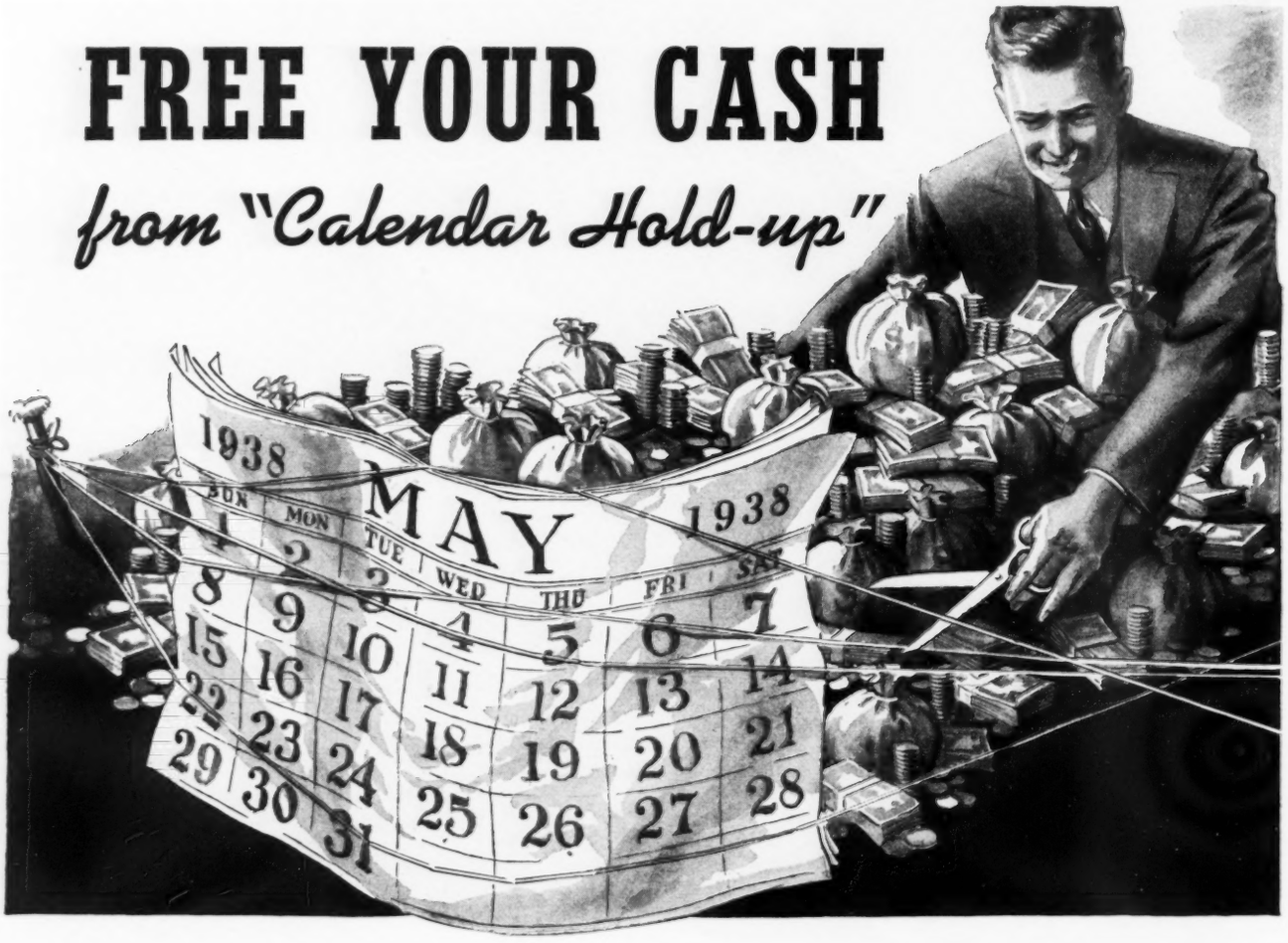
There is a proper thickness of material at what would otherwise be weak points. The pockets are machined inside so the barrels fit *snugly*. The heads and *inside of the pockets* are coated with heavy enamel paint in order to prevent the formation of rust from weave room moisture which might collect and stain the yarn.

WEST POINT FOUNDRY & MACHINE CO.
(Batson-Cook Company, Owners)
WEST POINT, GEORGIA

Also manufacturers of special machinery, cloth room machinery, sizing vats, spiral gears, beam racks, other textile machinery, and repair parts.

FREE YOUR CASH

from "Calendar Hold-up"



THIS MODERN FINANCING PLAN regulates collections, limits credit risks

WOULD you like to receive in a lump sum now the money that is owed you on open account?

Would you like to carry on your business so that immediately upon shipping and invoicing an order, the full proceeds in cash would be available to you?

Our open account financing plan does away with the 30 to 90 day wait for payment that you now endure. Your customers get their regular terms. You get your cash upon shipment . . . at a cost less than you'd allow them for cash discount. Your customers pay you as usual. And they are not notified of any change in your financing plans.

You keep full control of your business, pass credits and receive payments as made. You regulate your collections to your need for cash . . . selling us your receivables only in such amounts as your requirements call for.

In addition, under the LIMITED LOSS provision of our financing service, your credit losses cannot exceed a small pre-agreed percentage. We assume all the excess risk.

Make use of this flexible and economical plan of industrial financing. It assures you the extreme liquidity and high credit rating so helpful under present conditions.

COMMERCIAL CREDIT COMPANY

Capital and Surplus Over $64,000,000

BALTIMORE

NEW YORK CHICAGO PORTLAND, ORE. SAN FRANCISCO

★

"Capital At Work"

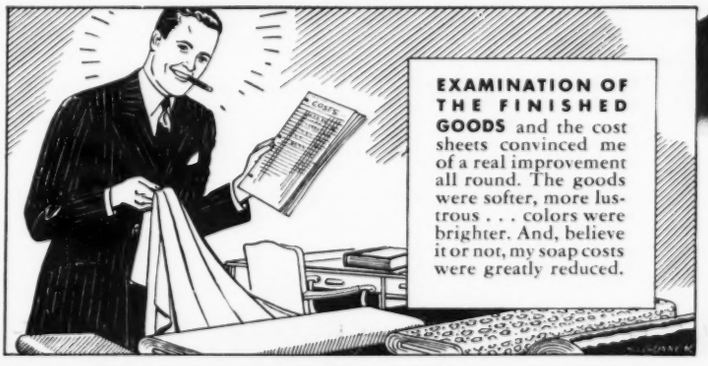
Upon request, we will gladly mail you, without obligation, this concise booklet explaining our service. . . Simply send this coupon, attached to your letterhead.

NOW I'M BANKING A 20% SAVING ON SOAP COSTS!

THIS TRUE STORY SHOWS WHAT C. P. P. SOAPS AND SERVICE CAN DO FOR YOU

I WAS DOING ALL RIGHT—costs weren't too high, goods were selling pretty well. But one day the Colgate-Palmolive-Peet man called . . . said he'd like to discuss our processing formula so his chemists could check it and try to improve it. When I found it wouldn't cost me anything, I agreed.

NOT LONG AFTER he was back with a formula his chemists recommended, based on standard C.P.P. Soaps. He asked me if I'd try it . . . see for myself if it wasn't better. It was certainly a fair proposition and we arranged a test run.



EXAMINATION OF THE FINISHED GOODS and the cost sheets convinced me of a real improvement all round. The goods were softer, more lustrous . . . colors were brighter. And, believe it or not, my soap costs were greatly reduced.

TODAY I'M SAVING 20% ON ALL MY RAYON PROCESSING . . . GETTING HIGHER PRICES FOR MY FINISHED GOODS, TOO. FROM NOW ON IT'S C. P. P. PRODUCTS FOR ME!

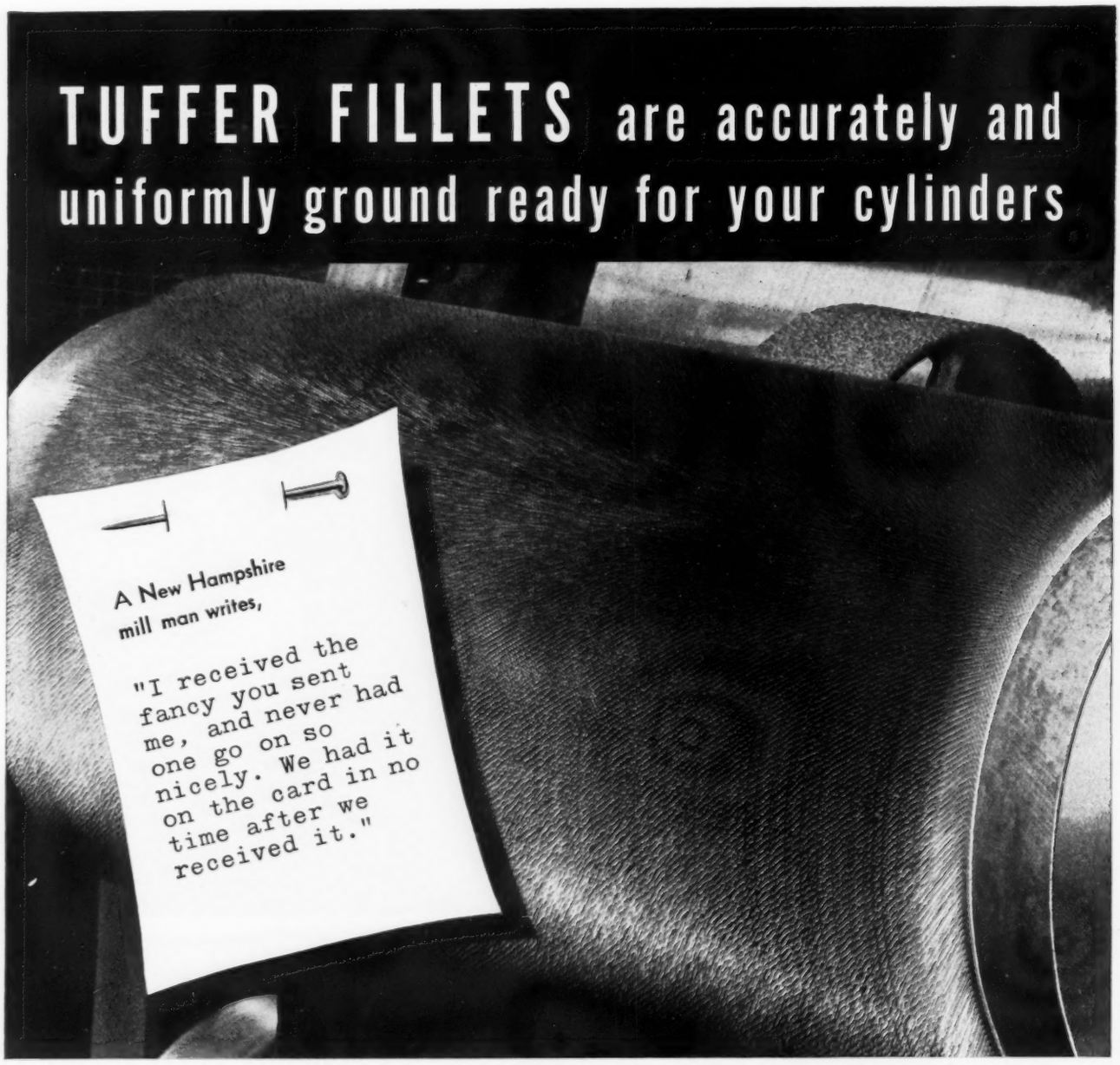
NO matter what *your* processing requirements may be, in the *complete line* of C.P.P. Products you will find detergents and wetting agents to *exactly fit your needs.* Because of the volume in which they are produced, C.P.P. processing agents usually *cost less to use* than so-called "special" products. And standardizing on C.P.P. Products will help you produce better finished work.

To help you select the best agents for *your* needs, we invite you to use our Free Consulting Service. For complete details, ask your C.P.P. representative, or write to us direct.

COLGATE-PALMOLIVE-PEET CO.
INDUSTRIAL DEPT., Jersey City, N. J.

KANSAS CITY, KANS. • JEFFERSONVILLE, IND. • BERKELEY, CALIF.

TUFFER FILLETS are accurately and uniformly ground ready for your cylinders

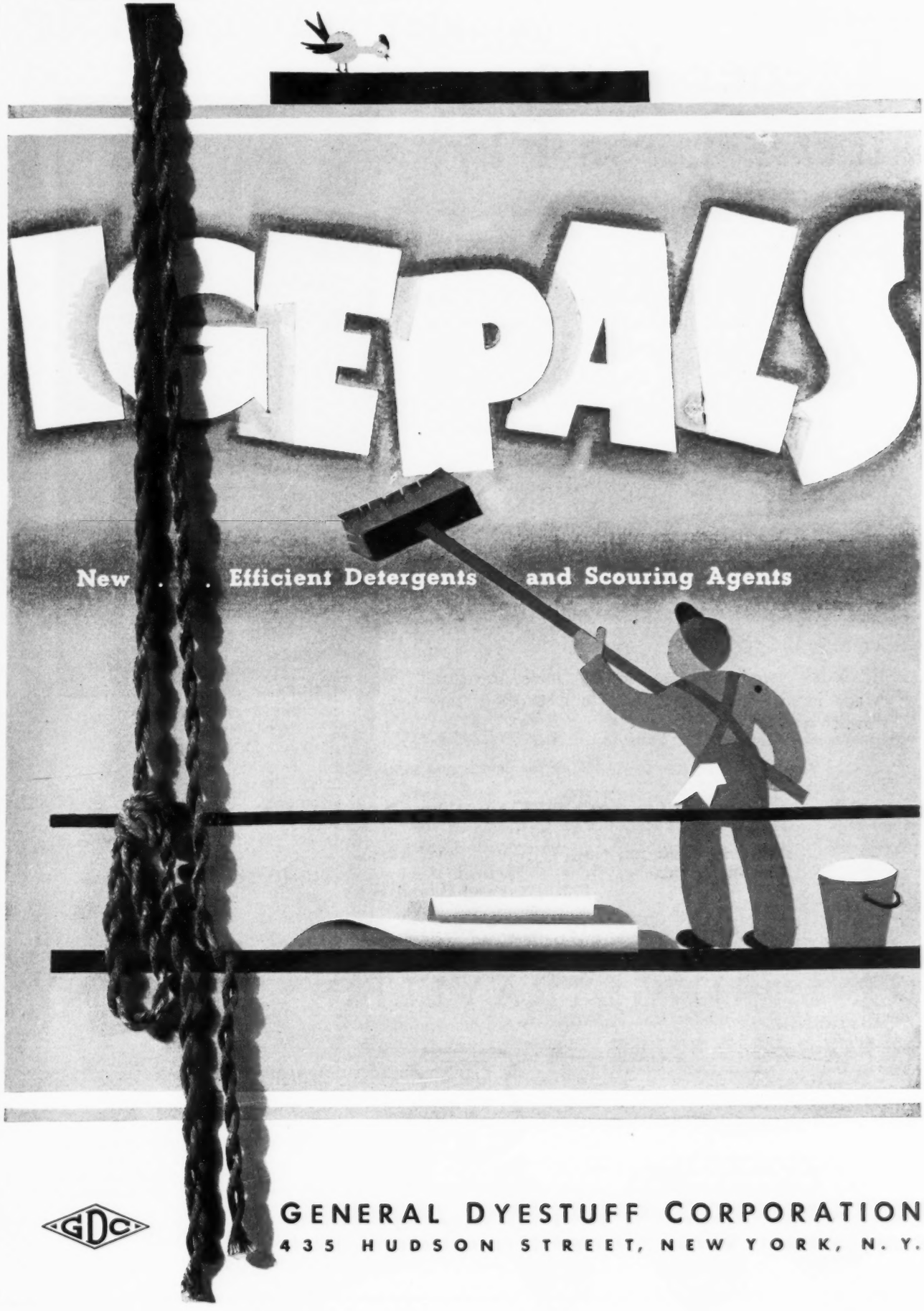

A New Hampshire mill man writes,
"I received the fancy you sent me, and never had one go on so nicely. We had it on the card in no time after we received it."

You can clothe your cards and start operations without lost time when you order Tuffer Card Clothing. Every point is ground to precision specifications before it leaves the plant, to allow you to put Tuffer Card Clothing to work immediately without grinding.

TRADE MARK
TUFFER
REG. U.S. PAT. OFF.
CARD CLOTHING

HOWARD BROS. MFG. CO.
HOME OFFICE AND FACTORY: WORCESTER, MASS.
Southern Plant: 244 Forsythe St., Atlanta **Branch Offices:** Philadelphia, Dallas
Canadian Agents: Colwool Accessories, Ltd., Toronto 2, Canada

Products: Card Clothing for Woolen, Worsted, Cotton, Asbestos, and Silk Cards—Napper Clothing, Brush Clothing, Strickles, Emery Fillets, Top Flats Recovered and extra sets loaned at all plants—Lickerins and Garnett Cylinders from 4 to 30 inches and Metallic Card Breasts Rewired at Southern Plant—Midgley Patented Hand Stripping Cards, Howard's Special Hand Stripping Cards and Inserted-Eye and Regular Wire Heddles



GDC

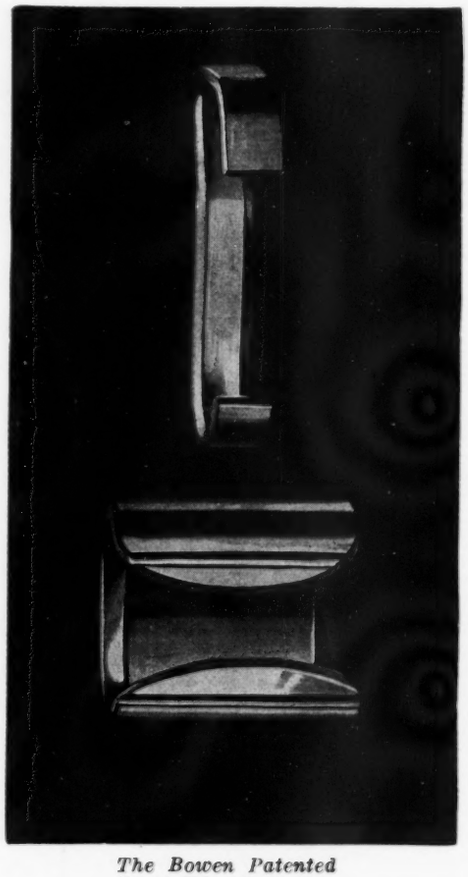
GENERAL DYESTUFF CORPORATION
435 HUDSON STREET, NEW YORK, N. Y.

Evener Yarn *with* Less Fly!

The uniform tension given by the patented Bowen Bevel Edge Travelers improves the spinning and twisting of all fibres.

- The swirling of the end in passing through the traveler produces *smooth even yarn.*
- This in turn reduces the *fly waste* to a minimum in the spinning and twisting of Cotton, Wool, Worsted and Asbestos.
- It also reduces the number of *split ends* in the throwing of Real and Artificial Silks.
- Bevel Edge Travelers are the result of combined research and experience in manufacturing Ring Travelers and are backed by the most modern mechanical equipment.

It is to your advantage to try *these* travelers. Made in all sizes and weights to meet every ring traveler requirement.



The Bowen Patented Bevel Edge Travelers

Write for details and samples of

The BOWEN TRAVELERS

Round and Square Point . Bevel Edge . Vertical Steel
Ne-Bow Vertical . Vertical Offset . Vertical Bronze
Flat, Oval and Round Wire

Manufactured exclusively by

U. S. RING TRAVELER COMPANY

PROVIDENCE, R. I. AMOS M. BOWEN, *President and Treasurer* **GREENVILLE, S. C.**

U.S. RING TRAVELER CO.

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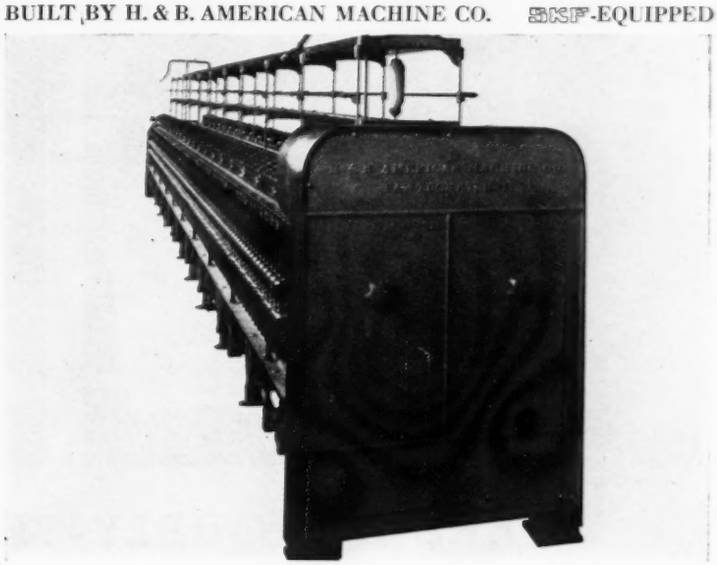
"A TRAVELER FOR EVERY FIBRE"

SKF-equipped Spinning Frames Maintain EVEN SPEEDS

BUILT BY H. & B. AMERICAN MACHINE CO. SKF-EQUIPPED



H. & B. made certain of uniform speeds from this spinning frame by using SKF Roller Bearing Spindle Bolsters, SKF Tension Pulleys and SKF Self Aligning Ball Bearings on drum cylinders.

Result: even twist and strong yarn. Plus: reduced power costs, lubrication and maintenance expenses.

It's as easy for *you* to obtain these advantages—by bringing your bearing problems to antifriction headquarters. Know why SKF today is the largest manufacturer of industrial bearings in the world.

SKF INDUSTRIES, INC., PHILADELPHIA, PENNA.

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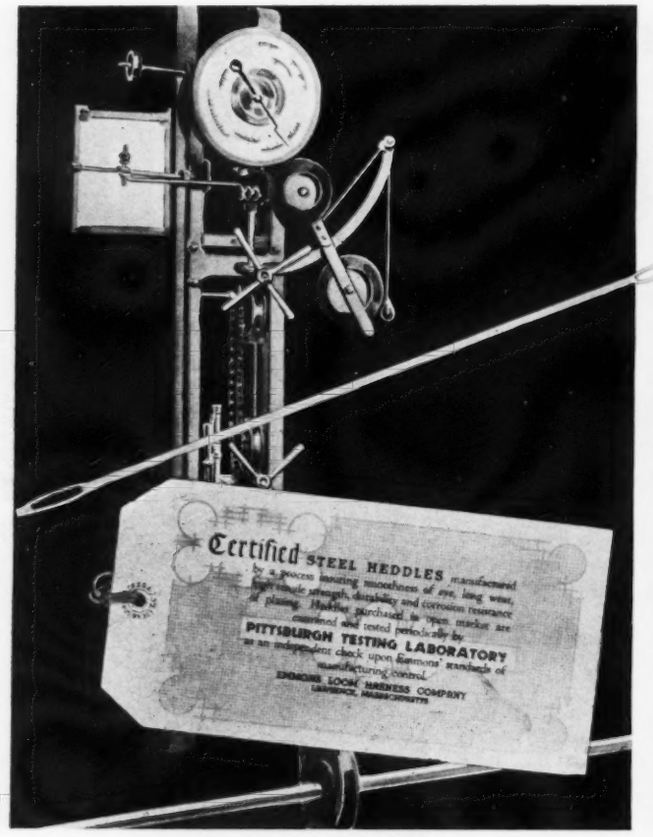
● SKF *makes more types and sizes of ball and roller bearings than any other manufacturer in the world.*

SKF

BALL AND ROLLER BEARINGS



HERE'S DOUBLY-TESTED QUALITY

Emmons "Certified" Steel Heddles Are The Only Ones That Give You This Kind Of Protection For Your Weaving

To be sure that mill men get every penny's worth of quality they pay for — Emmons has a double insurance for them. It's a virtual guarantee that they'll get better weaving over a longer period of time with "Certified" heddles.

Emmons "Certified" Steel Heddles are independently tested by famous Pittsburgh Testing Laboratory for the features which *do* produce better weaving. They buy their heddles in the open market . . . make their careful analysis of smoothness of heddle eye, tensile strength, corrosion resistance, etc. . . . then they report to us. That's *outside control* for your protection.

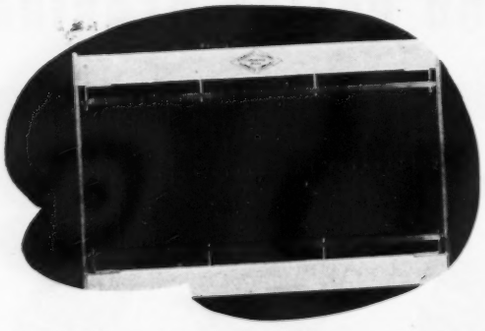
And *inside control* is strictly maintained over every operation by our own men. We began with a high standard of manufacturing three-quarters of a century ago . . . and we keep it high today.

Use the heddle with the "Certified" tag and the Inspected & Approved seal. It's the logical choice for the man who is a careful buyer. Write, wire, or 'phone your order to Emmons Loom Harness Company, Lawrence, Massachusetts.

Emmons

"CERTIFIED" STEEL HEDDLES

TUBULAR-ALUMINUM END HEDDLE FRAMES



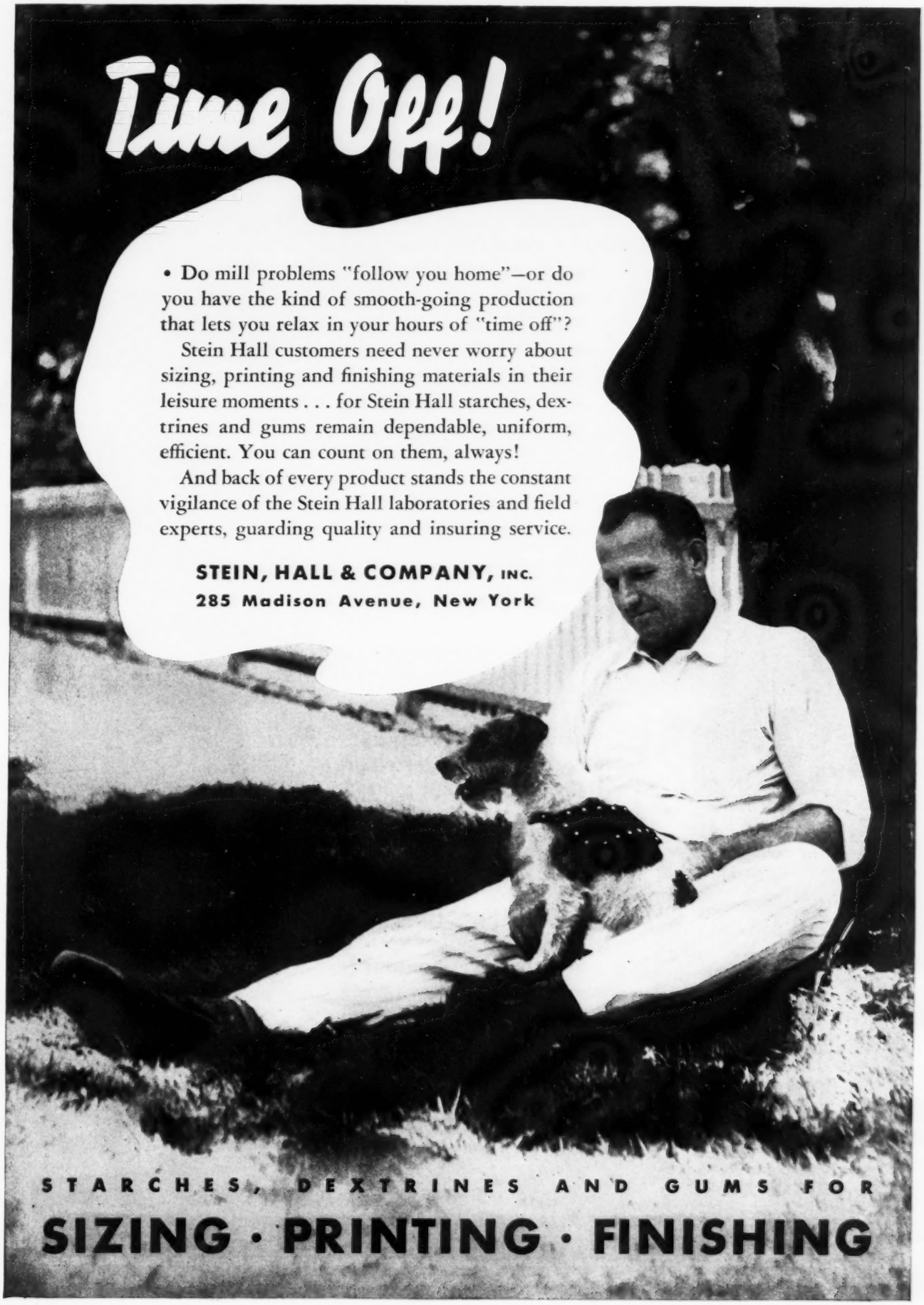
TUBULAR-ALUMINUM ENDS . . .

Rigid. Keeps heddles in free-sliding upright position throughout frame life. Friction on warp yarns is decreased.

RUST DEFYING

All parts are rust resistant. There's no danger of dirtying or discoloring the yarn.

ALL EMMONS PRODUCTS ARE LISTED IN TEXTILE WORLD YEARBOOK


Time Off!
• Do mill problems "follow you home"—or do you have the kind of smooth-going production that lets you relax in your hours of "time off"?
Stein Hall customers need never worry about sizing, printing and finishing materials in their leisure moments . . . for Stein Hall starches, dextrines and gums remain dependable, uniform, efficient. You can count on them, always!
And back of every product stands the constant vigilance of the Stein Hall laboratories and field experts, guarding quality and insuring service.
STEIN, HALL & COMPANY, INC.
285 Madison Avenue, New York
STARCHES, DEXTRINES AND GUMS FOR
SIZING · PRINTING · FINISHING

LUNKENHEIMER 125 lb. SP BRONZE GATE VALVES

Unusually strong and rugged and with features designed for added service life these 125 lb. SP bronze gate valves offer many advantages to valve users.

Double Wedge Disc
Taper Seat
Rising Stem

Non-heat, easy grip, malleable iron handwheel.

Stuffing box is deep and well packed. Hexagon head gland in all sizes.

Hard bronze stems with long powerful thread, accurately machined.

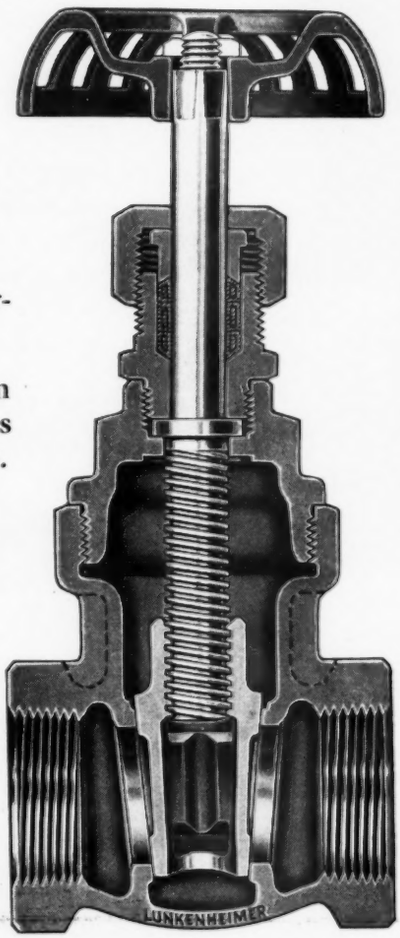
Perfectly machined surfaces form tight seats for repacking valves under pressure when wide open.

Heavy wide flats on bonnet provide firm wrench hold even on smaller sizes.

Bonnet collar is exceptionally sturdy and provides tight body-bonnet joint.

Disc wing guides and body guide channels are beveled to insure easy assembly.

Bodies have full flow straightway areas. Long pipe thread and ample clearance at end of thread prevent pipe ends from jamming against seats.



Single Wedge Disc
Taper Seat
Non-rising Stem

For detailed design and construction features write for circular No. 544

THE LUNKENHEIMER CO.
"QUALITY"
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NEW YORK CHICAGO
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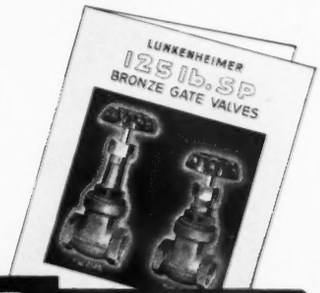

BOILER MOUNTINGS — LUNKENHEIMER VALVES — LUBRICATING DEVICES

11012-43-10

Bring Better Illumination To Your Plant With Pittsburgh Glorified Light Paints!

LIFT the depressive, harmful pall of incorrect lighting from your plant. Paint clear vision throughout with Pittsburgh Glorified Light Paints. Your employees will benefit by the improved illumination these scientifically prepared, soft-toned wall finishes bring. You will benefit by increased production, fewer accidents—better working conditions all around.

Perfected by leading authorities on light-control, these custom-made finishes *diffuse* and *reflect* all available raw light—whether natural or artificial. They convert every foot candle power into beneficial, profitable illumination —illumination without *dangerous glare* and *costly gloom*.

Send for the facts—TODAY!
The Pittsburgh "Glorified Light" Book contains many valuable facts on improving the illumination in all types of plants. Send for your free copy *right now*. See how simply you can bring *glorified light* into your plant. Clip coupon below. Pittsburgh Plate Glass Company, Paint Division, Pittsburgh, Pennsylvania.

THERE IS A GLORIFIED LIGHT PRODUCT FOR EVERY TYPE OF FACTORY!

THE SNOLITE SYSTEM will bring profitable Glorified Light into any plant with normal interior surfaces.

THE SNOTEX SYSTEM is specially designed for all abnormal interior surfaces except those affected by fungus growth. It resists discoloration from humidity, fumes, gases and lack of daylight.

THE FUNGUSIDE SYSTEM effectually retards the growth of fungus. It is vitally necessary in bakeries and food factories — wherever fungus presents a problem.

Copr. 1938 Pittsburgh Plate Glass Co.

PITTSBURGH PAINTS
Smooth as Glass

COMPLETE LINE OF STRUCTURAL MAINTENANCE FINISHES

SEND FOR THIS BOOK TODAY

Pittsburgh Plate Glass Company
Paint Division, Dept. C5,
Pittsburgh, Pennsylvania

Please send me free your book, "Glorified Light".

Name_____

Address_____

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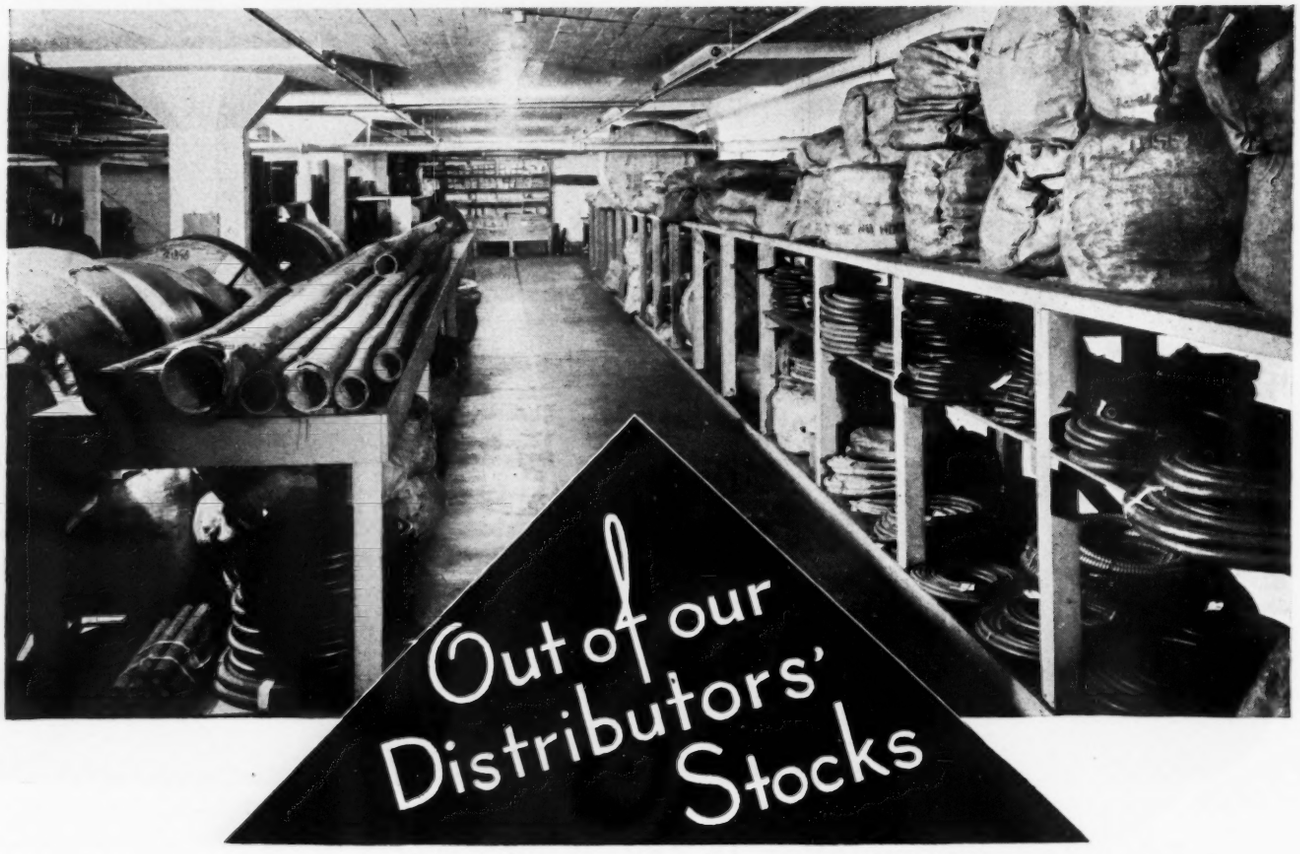
THE RIGHT BELT and THE RIGHT HOSE•



In line with our policy of selling through distributors, for years Republic has enjoyed close relations with the foremost mill supply outlets in the country.

As a result of our thorough cooperation, these distributors offer a service on Republic Mechanical Rubber Products that is complete in all details. They assist buyers in determining specifications and carry ample stocks in a wide variety of products for immediate delivery. They are supported by the aid of factory experts whenever an unusual problem is presented.

Discuss your mechanical rubber requirements with the Republic Distributor nearest you. Become familiar with every branch of his helpful service. His business thrives because he is able to give you a more prompt and more economical service than any manufacturer.

REPUBLIC RUBBER

Division OF LEE RUBBER AND TIRE CORPORATION
YOUNGSTOWN, OHIO

Manufacturers of HOSE
BELTING • PACKING
MOLDED PRODUCTS

ORDER REPUBLIC RUBBER PRODUCTS FROM YOUR DISTRIBUTOR

PLAY SAFE WITH CAUSTIC SODA

THAT BEARS THIS DOUBLE "O.K."

It is right that cotton textile and rayon manufacturers should be exacting about the purity of caustic soda. Only in this way can they properly control the results of critical processes.

Working closely with the industry, Pennsylvania Salt Manufacturing Company has developed a method of producing extra pure electrolytic caustic soda—low in salt content, and extremely low in iron.

Commercial caustic soda, made to this Company's high standards, is only the starting point. An additional process—a double purification—eliminates impurities so thoroughly that this product meets every requirement of the textile industry. When it has received its second or final "O. K.", you know you can depend on it fully.

It is supplied in aqueous solution in 8,000-gallon tank cars, as well as in solid, flake, or ground form in drums. Our technical staff will gladly help with all problems of pumping, piping, and dissolving. Why not write us today, and let us discuss your problems?

PENNSYLVANIA SALT MANUFACTURING COMPANY
EST. 1850 · WIDENER BLDG., PHILADELPHIA, PA.
NEW YORK · CHICAGO · ST. LOUIS · PITTSBURGH · TACOMA · WYANDOTTE

PENNSYLVANIA SALT *Chemicals*

In one year...

MILL CUTS COSTS $7,500

Taylor System of Automatic Control in slashing room saves on starch...reduces coal consumption...saves cotton ...jumps up efficiency of weave room

CONSIDER what Taylor Control engineered for *your* mill might do to cut *your* costs?

It was a six-slasher mill producing over 4,000,000 pounds of cloth yearly. In 104 x 72, 116 x 84, 100 x 52, 100 x 60, and 128 x 64 constructions.

The problem of cutting costs was most important. Taylor engineers were asked to investigate and see how a system controlling slasher temperatures might reduce costs and increase production efficiency.

A survey followed. Detailed recommendations promised relief. Mill executives accepted the plan. And the Taylor installation began to produce results almost at once. *In one year the total savings mounted to $7,500—and more.*

The saving on starch in the size amounted to nearly $1,500 a year.

The saving on coal, caused by more efficient use of steam, totaled two hundred and forty tons, or slightly over $1,000.

The yearly saving on cotton was over 40,000 pounds, or more than $5,000 at the current market.

And the total of $7,500, or more, did not take into consideration the value of a 1% increase in weave room efficiency resulting from the more efficiently conditioned warps delivered by the slashing room.

In *all* mills, Taylor Control is designed for increased weave room efficiency and better hand and appearance in the cloth. In some mills (as in this one) a material cotton saving is made. Under manual operation, there is poor solid retention on the warp. This requires the use of slightly coarser yarn numbers to maintain cloth weights. Under Taylor automatic operation, finer yarn numbers can be used. A saving in cotton naturally follows.

Start in *your* slasher room to increase production yet decrease expenses. Let Taylor engineers survey your operations. No matter what slashing equipment you have, Taylor Temperature Control can be used. For full information, ask a Taylor representative. Or write Taylor Instrument Companies, Rochester, N. Y. Plant also in Toronto, Canada. Manufacturers in Great Britain—Short & Mason, Ltd., London, England.

Automatic Temperature Control
"TAILORED" TO FIT YOUR NEEDS

1. Taylor Textile Engineers survey your mill thoroughly.

2. They consider your installation an individual problem, recommending instruments and steam and size distribution to fit your specific needs.

3. Taylor Textile Engineers install complete systems to assure definite savings and profits.

4. They remain on the job to supervise the installation of every Taylor instrument.

5. Taylor Textile Engineers properly balance slasher room operating conditions and help train personnel in operating procedure to insure continuous efficiency.

Taylor
Indicating Recording Controlling
TEMPERATURE, PRESSURE, FLOW *and* **LEVEL INSTRUMENTS**

PARKS TRAVELING CLEANERS

bring Savings and Smiles

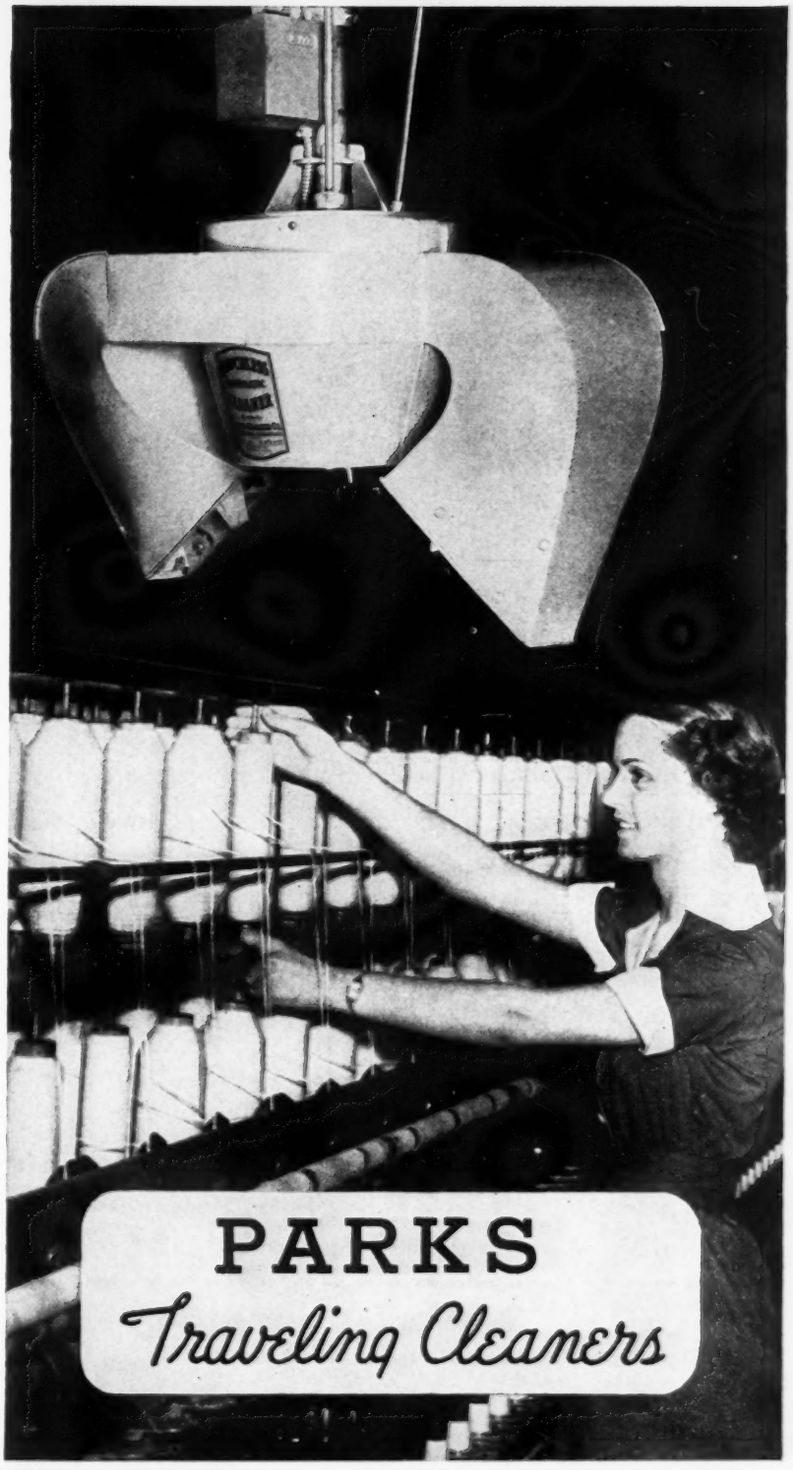
The rapid growth in number of installations of Parks Automatic Traveling Cleaners since 1929 is proof of their accomplishments.

Users say a lot of nice things about them:

"Advantages of the Traveling Cleaner system are numerous. It certainly does cut down, practically eliminates, the cleaning the spinner has to do. It has cut our gouts decidedly; we checked that in the spinning room and found less than half as many after installing the Cleaners. The Cleaners are not expensive to keep up; no expense for maintenance and supplies in four years of use."

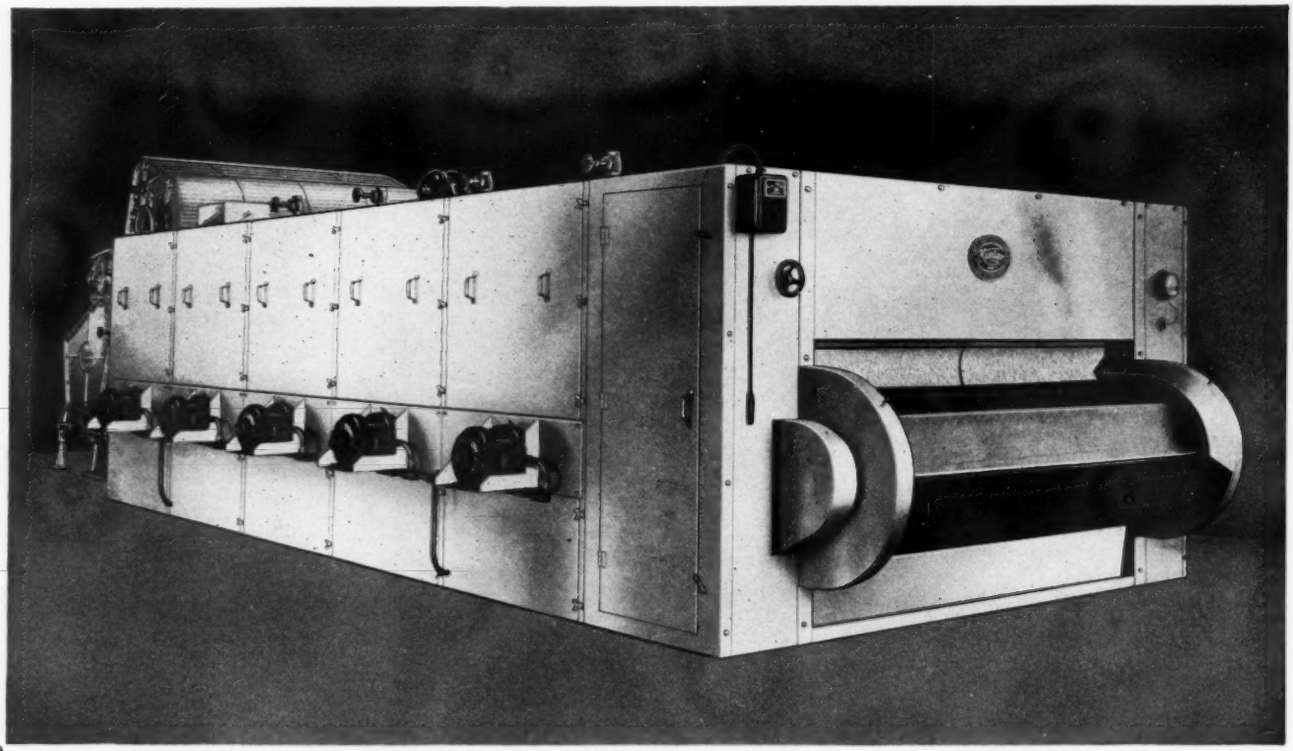
"Tests made before and after installing the Traveling Cleaners showed loom stoppage was reduced 39% in one mill and 32% in another, evidence of improved quality and production."

You need this helpful accessory. Send for a sales engineer to give you more details, prices and experiences of others.



PARKS-CRAMER CO • FITCHBURG, MASS. • CHARLOTTE, N. C.

77 INSTALLATIONS



MAIL THE COUPON

PROVE MERIT OF NEW HUNTER STOCK DRYER

In 75 installations, some of them separate orders, the Hunter Single Apron Duplex Dryer, operating on a variety of fibers has conclusively demonstrated its merit. For example, in a New Hampshire mill in less than 25 linear feet of floor space, it is drying over 600 lb. per hour, rayon, wool, cotton, etc. In a North Carolina mill a Hunter Duplex in less than 40 feet of floor space is delivering 1500 lbs. of dyed cotton hourly. In a Rhode Island combing plant a Hunter Duplex in less than 30 linear feet is delivering over 1000 lbs. of scoured wool hourly.

For complete details send for Bulletin. This new Brochure will tell you in detail the outstanding mechanical features of the machine which are unique in the Hunter Dryer. Full production data on a wide class of stock will also be sent you. You will not be obligated in any way. Send the coupon today!

Without obligation, please send new brochure describing the Hunter Single Apron Duplex Dryer.

*Name*_____ *Title*_____

Company _____

*City*_____ *State*_____

JAMES HUNTER MACHINE COMPANY

NORTH ADAMS, MASS.

Southern Agts: Carolina Specialty Co.,Charlotte, N.C.
Western Representative: E. G. Paules, 343 Bendix Bldg. 1206 Maple St., Los Angeles, Cal.
Canadian Agents: Colwood Accessories, Ltd., 126 Wellington St., Toronto.

LARGEST VARIETY OF SULPHONATED OILS *at your service*

Sulphonated Oils most generally used:

SULPHONATED OLIVE OIL W-700 S-370D.P. W-402B W-555 W-689B

SULPHONATED CASTOR OIL In Every Concentration

MONOPOLE OIL 80 A.S. M.D. M.D.D. D.P. P.P.

SULPHONATED RED OIL S.I.L. 50% and 85% concentrations

COCONUT OIL S-23D W-530C

MINERAL OIL S-317 W-415A

SOLUBLE PINE OIL S-189 S-190

PARA OIL 15% and 50% concentrations

SOAKING OIL Silk Oil "S" and Silk Oil "O"

BOIL-OFF OIL #1 W-425 W-609 S-62D

BASE OIL S-340A S-396B S-379

SPECIAL TYPES S-261C Oratol W-746C Oratol W-461A

We can supply you with any type of sulphonated oil or adapt any oil to your specific needs.

Our sulphonated olive oils are made exclusively from Spanish Olive Oil by special methods of sulphonation which make them completely soluble. Our Oratol Oil series has an olive oil base combined with other vegetable oils of similar characteristics.

Castor oils, single or double sulphonated, are extremely soluble, absolutely clear, low in neutral fat and available in 35% to 90% concentrations.

Monopole Oil is a double sulphonated castor oil made in varied concentrations and adjustments to meet special requirements.

Every Jacques Wolf product undergoes strict laboratory and production control tests. The facilities of our laboratories are at your disposal. Samples of any product will be sent on request.

Sulphonated Oils for Every Purpose

JACQUES WOLF & CO.

MANUFACTURING CHEMISTS AND IMPORTERS . . . PASSAIC, NEW JERSEY

Warehouses: **Providence, R.I.; Philadelphia, Pa.; Utica, N.Y.; Chicago, Ill.; Greenville, S. C.; Chattanooga, Tenn.**

No matter how good a picker lap *seems* to be; test the card sliver to find out how good it *is*.

The new Aldrich Synchronizers have consistently made laps producing evener card sliver on every comparative test that has been reported to us. Evener card sliver naturally makes evener roving and yarn.

Long draft carding and spinning equipment demands even card sliver---

Aldrich Synchronized Single Process picking is the way to get it.

AldricH MachinE

Greenwood, **WorkS** South Carolina

Now is a good time to have a Standard lubrication engineer show you the economy of STANDARD OIL LUBRICANTS.

When spindle hours get fewer, and operating figures hover between black and red—the importance of *correct* lubrication in holding down power and repair costs, and in preventing spoilage, is even more important...

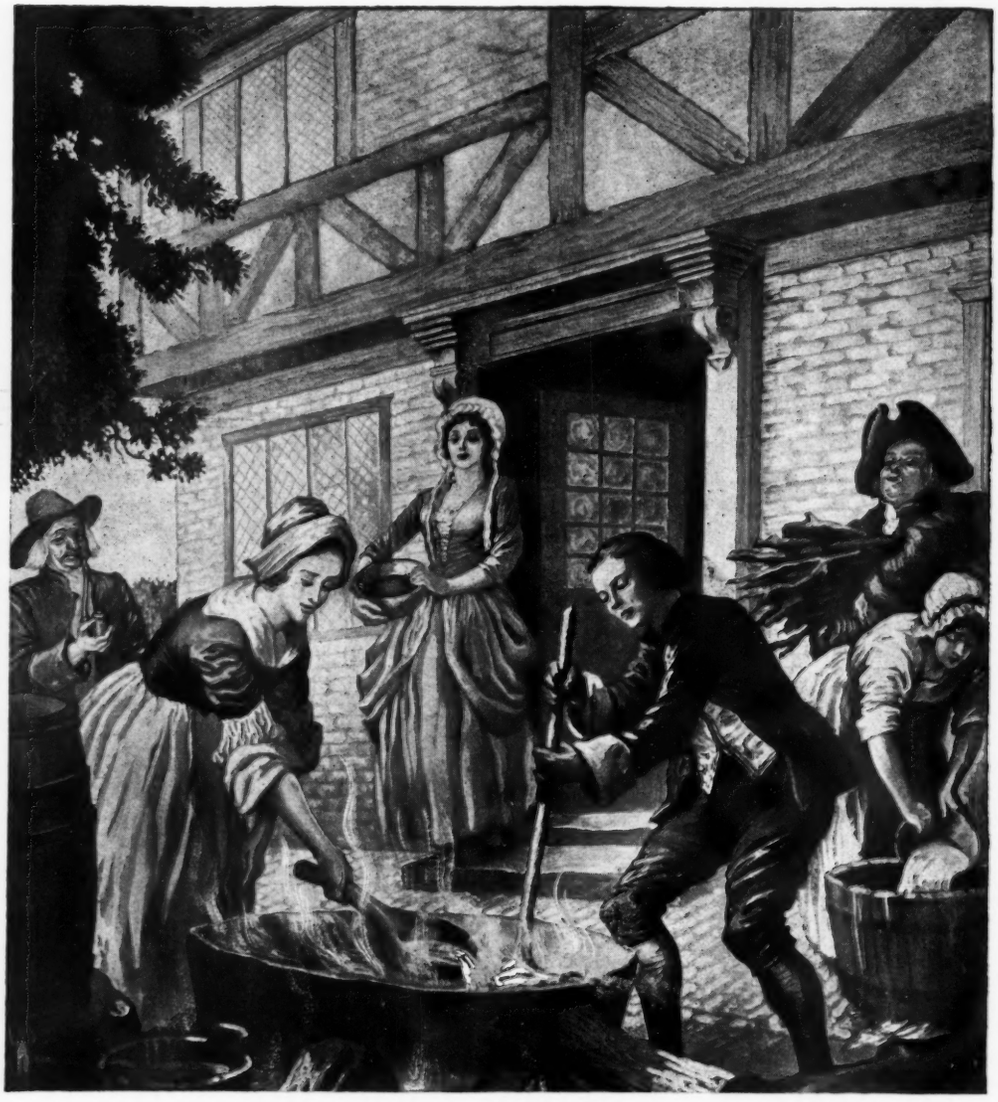
For half a century, Southern mills have found that for dependable, economical lubrication, STANDARD OIL LUBRICANTS can't be matched . . . A consultation with a Standard lubrication engineer will point real savings to you, *at a time when savings count.*

STANDARD OIL COMPANY

INCORPORATED IN KENTUCKY

Through the Centuries with Alkalies

In the American Colonies soap-making was at first largely a household art. The housewife saved the wood-ashes (soda) from the great fireplaces and the grease from the kitchen. By pouring water over the ashes lye was made. The lye and grease were then boiled together until the compound was strong enough to hold up an egg. This strong soft soap was kept in a wooden soap box in the kitchen where it was available alike for Saturday night baths and the family laundry. Later on caustic soda was bought at the grocer's and mixed with hot fat and grease for the home-made soap.



Such resourcefulness and thrift as the Colonial housewife practiced is of vital importance to American business today. In the face of mounting costs and heavy taxation, executives are checking sources of supply with great care and buyers of raw materials are testing quality as never before. As a supplier of Soda Ash, Caustic Soda, Bicarbonate of Soda, Modified Sodas, Calcium Chloride and Liquid Chlorine, serving many major industries, The COLUMBIA ALKALI CORPORATION welcomes this challenge and this responsibility. Its officers and staff pledge themselves anew to deliver the utmost in product, value and service.

SODA ASH
CAUSTIC SODA
SODIUM BICARBONATE
MODIFIED SODAS
LIQUID CHLORINE
CALCIUM CHLORIDE

COLUMBIA

THE COLUMBIA ALKALI CORPORATION

BARBERTON • OHIO

NEW YORK CHICAGO BOSTON PITTSBURGH
CLEVELAND CINCINNATI ST. LOUIS MINNEAPOLIS

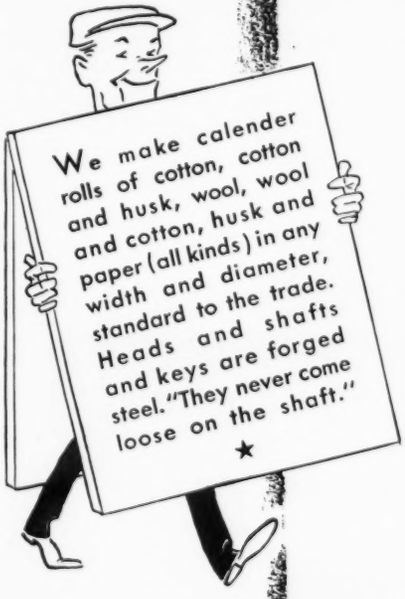
JUST TRY ONE OF OUR ROLLS...

New or Refilled

...Then you'll know why they are called Long Life Rolls. You'll also know why they are used in the largest textile plants in the world.

During more than half a century of roll making, we have developed a process for making calender rolls which makes us ask *you* to try just *one* Long Life Roll. Put it in the stack with any other roll and time them both. We want you to be sure that you get more for your money in a Long Life Roll.

★


We make calender rolls of cotton, cotton and husk, wool, wool and cotton, husk and paper (all kinds) in any width and diameter, standard to the trade. Heads and shafts and keys are forged steel. "They never come loose on the shaft."
★

H. W. BUTTERWORTH & SONS CO., PHILADELPHIA, PA.

Established 1820

PLANTS at PHILADELPHIA and BETHAYRES, PA.

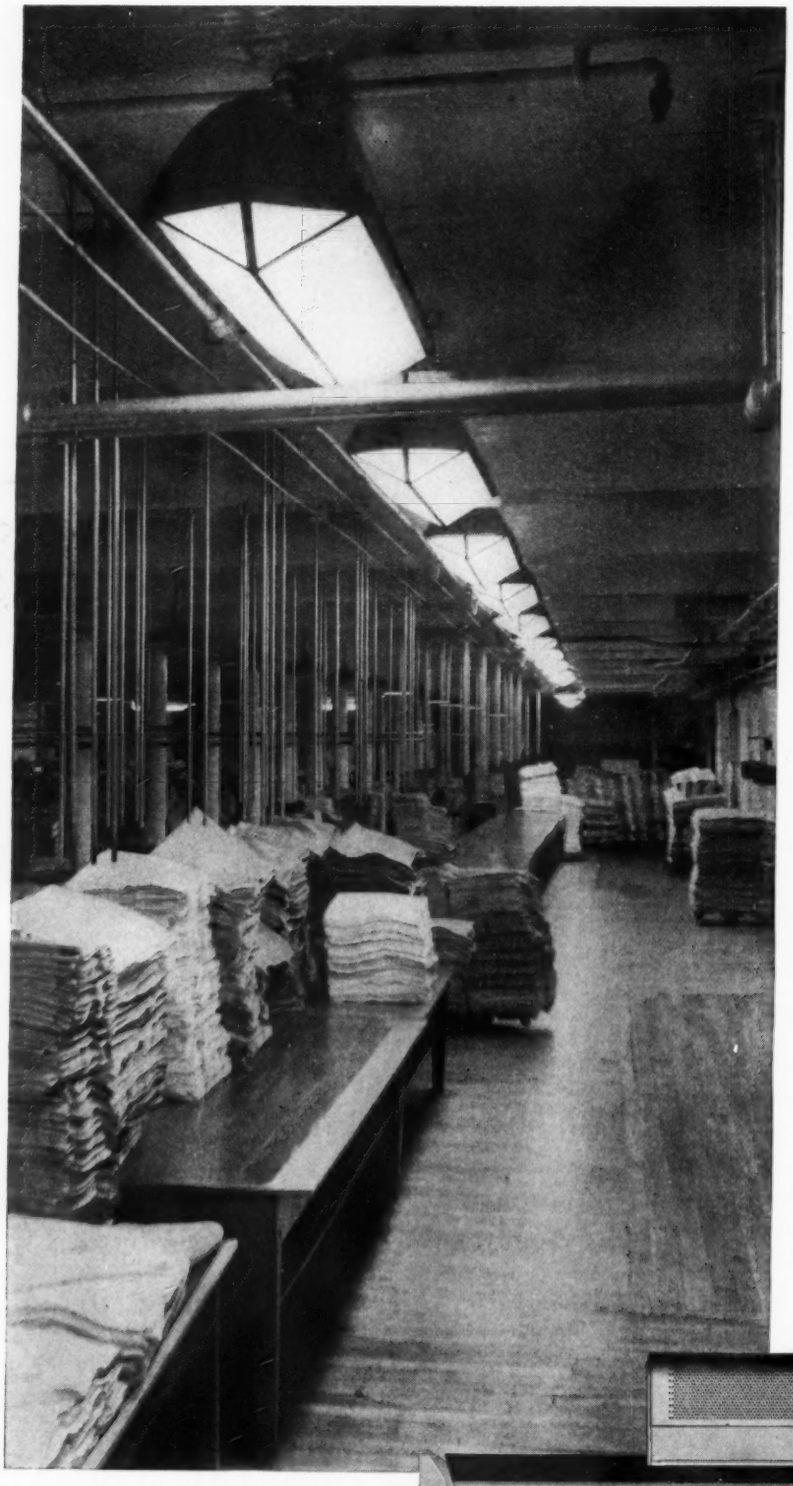
New England Office:
TURK'S HEAD BUILDING
Providence, R. I.

Southern Office:
JOHNSTON BUILDING
Charlotte, N. C.

In Canada:
W. J. WESTAWAY CO.
Hamilton, Ontario

BUTTERWORTH *finishing* MACHINERY

A COMPLETE LINE OF FINISHING AND RAYON MACHINERY FOR THE TEXTILE INDUSTRY



SKY-HIGH in "seeability"

GENERAL ELECTRIC "SKYLIGHTS" BRING BETTER SEEING TO BLANKET PLANT

For sewing, inspecting and packing blankets in this newly modernized plant, General Electric "Skylights"—combining mercury vapor and incandescent light—provide the high seeability that protects product quality every hour of the day.

On sewing and sorting tables, the illumination is 50 foot-candles or more—a soft, glareless light that reveals fine details and puts an end to eye-fatigue. Shadows are eliminated by the "large-area" source. Colors are shown with close fidelity to actual daylight.

Representatives of the General Electric Vapor Lamp Company who lay out jobs like this are industrial lighting specialists . . . they know the economics as well as the engineering of a lighting system that pays its way today. Why not get their recommendations on your immediate or long range plans? General Electric Vapor Lamp Company, 853 Adams Street, Hoboken, New Jersey.

In the General Electric Combination "Skylight," the excess yellow-red common to incandescent light sources is balanced by blue-green output from a "large-area" mercury vapor tube . . . Bulletin 521 gives complete details.

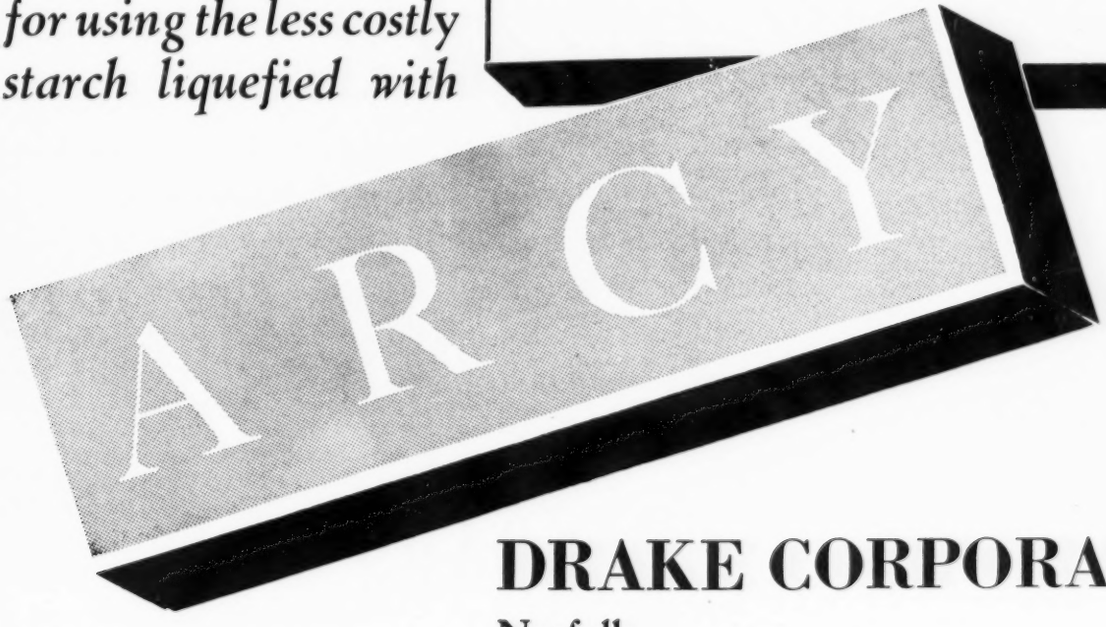
GENERAL ELECTRIC VAPOR LAMP COMPANY

901C

What do USERS say?

"IT is not because of the dollar or so we save in the cost per kettle of size that we use Arcy Liquefied 'less costly' starch, but because of the superior results we get from its use."

Just one of the many reasons given by mill operating executives for using the less costly starch liquefied with



DRAKE CORPORATION

Norfolk, Virginia.

It's Genuine

The convincing mark of a Kaumagraph Dry Transfer would leave no doubt. Attractive, easy to apply, and economical, K.D.T.'s may be had to mark any material, any texture. They meet every demand for adequate fibre identification; they help build good will. Kaumagraph complete service also includes lithographed packing and distinctive embossed seals.

KAUMAGRAPH DRY TRANSFERS

Identification Headquarters

KAUMAGRAPH 200 Varick Street, New York

Plants: New York City . . Paris, Ontario . . Manchester, England—Representatives in Principal Textile Centers of the World

DOUGLAS textile starches

REPRESENT
THE ADVANTAGES OF
SUCCESSFUL MANUFACTURING
EXPERIENCE OF MANY YEARS.
WE BELIEVE THE UNIFORM QUALITY OF
THESE CORN STARCHES IS THE REASON WHY
SHIPMENTS IN 1937 CONTINUED THE HIGH RECORDS
OF THE PAST.

MANUFACTURED AND SOLD BY

PENICK AND FORD, LTD., INC.

STARCHES - DEXTRINES - GUMS - CORN SUGARS - CORN SYRUPS

NEW YORK, N. Y. CEDAR RAPIDS, IOWA

REPRESENTATIVES THROUGHOUT THE SOUTH

TEXTILES

MAKE A BETTER BELT FOR THE TEXTILE INDUSTRY

in U. S. ROYAL JR.

***Write* FOR YOUR FREE COPY** *of the U. S. Transmission Belt Album . . . with case histories, problems, applications . . . U. S. belts at work and in the making.*

● Every foot of U. S. Royal Jr. Transmission Belting is made-to-order for textile mill drives. Flexible layers of tough cotton duck, thoroughly impregnated with specially compounded live rubber . . . for powering cards, spinners, and looms. It's a light, flexible, and elastic belt . . . that runs steadily and true despite high speeds . . . crossed drives . . . frequent shifting. Operators like its easy feel . . . its quick responsiveness! Mill superintendents order Royal Jr. because of its wide range of application . . . because it requires a minimum of care . . . because it invariably gives you Service Beyond Price and Specifications.

UNITED STATES RUBBER COMPANY · US · TRADE MARK

United States Rubber Company

United States Rubber Products, Inc., New York, N. Y.

Perky Prints

STAY BRIGHTER LONGER

when the fabric is finished with "AVITEX"

ONCE AGAIN you're bringing out a vivid variety of gay summer fabrics. Greeting the season with colors and patterns brighter and sharper than ever before.

Will these fabrics still be mill-fresh...the whites white, the colors bright...when it's time for Mrs. America to buy? Yes, if you've used "Avitex" finishing agents.

You can always depend on "Avitex" to prevent air oxidation and dealer complaints. Yellowing or unpleasant odors don't develop even after long periods of storage.

"Avitex" gives you finer finishing for cotton, linen or rayon...without increasing your present finishing costs. Our nearest office will gladly show you how. Write.

DU PONT

REG. U. S. PAT. OFF.

AVITEX

REG. U. S. PAT. OFF.

TEXTILE FINISHING AGENTS

E. I. DU PONT DE NEMOURS & CO., INC.
Fine Chemicals Division, Wilmington, Delaware

SALES OFFICES:
Boston, Mass., Charlotte, N. C., Chicago, Ill., New York, N. Y., Philadelphia, Pa., Providence, R. I. and San Francisco, Calif. Represented in Canada by Canadian Industries Limited, Box 1260, Montreal, Quebec, and 372 Bay Street, Toronto, Ontario.

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DU PONT

REG. U. S. PAT. OFF.

AVITEX

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Yours for the Asking!

. . . THESE FACTS ABOUT GEORGIA AND THE OPPORTUNITIES SHE OFFERS

To interested business men, to prospective residents or visitors — we offer eight booklets on Georgia, each setting forth in clear and concise fashion a separate phase of Georgia's attraction to industry, to commerce, to wholesome life.

By title, the booklets are:

"Cotton—from Field to Fabric"
"55 Facts About Georgia — historical, statistical and general"
"Education in Georgia"
"Digging for Treasure in Georgia" (ceramics and minerals)
"Pine into Paper"
"Sports and Recreation in Georgia"
"On the Farms of Georgia"
"Electric Power and Industrial Growth in Georgia"

Any or all of these booklets — and all of them are filled with interesting and useful information, will be mailed to you upon request.

Industrial Department

Georgia Power Company

ATLANTA

Working Hand in Hand

Since April 17, 1933, A C I has been working hand in hand with producers, sellers, buyers and consumers of the "world's finest bituminous coals." With this background of five years' experience, we look ahead to our sixth and succeeding years.

Events move too fast today to mark time. Through the companies we serve—producers and their sub-agents—we are carrying on to new achievements, to help the cotton and textile industries.

A C I will continue, through engineering facilities, to help the producers, sellers, buyers and consumers of coal work cooperatively and collectively to solve their mutual problems.

A C I will continue to bring about a better understanding between buyer and seller of all the factors involved in the successful application and utilization of high volatile coals from Kentucky, Tennessee, Virginia, West Virginia.

Through advertising, literature, publications, fuel engineering service, statistical work, traffic service and sales promotion, A C I gives assistance to fuel buyers and the engineers of the cotton and textile industries.

Write for your copy of "The A C I Family," a pocket-size booklet listing A C I Agents, A C I Producers, Seams, Districts, etc.

APPALACHIAN COALS, Incorporated

Transportation Building Cincinnati, Ohio

APPALACHIAN STABILITY W.VA KY VA TENN ACI QUALITY · SERVICE COALS, INC.

1. IT MAKES BETTER WARPS

(a.) Less Shedding (b.) No Foaming

2. IT COSTS LESS TO USE

(a.) Highly concentrated (Less required)
(b.) Lower Transportation Costs
(c.) No Waste (Clean Floors, Pipes and Kettles)

3. IT'S EASIER TO HANDLE

(a.) Dry Form (b.) Convenient Packages

TRIAL LOT ON REQUEST AHCO PRODUCTS

★ A new synthetic warp sizing in DRY form. Patent applied for

Arnold-Hoffman & Company, Inc.

Established 1815 . . . Plant at Dighton, Mass.

PROVIDENCE, R. I.

NEW YORK BOSTON PHILADELPHIA CHARLOTTE

DUPONT MEASURE PAINT VALUE BY THE PERFORMANCE YARDSTICK DUPONT

BE CAREFUL!

A penny saved may not be a penny earned when you buy paint...

Because the pennies you save on the purchase price may cost you dimes when you put it on

IF you're looking for a mill white that will save you the most money, don't let price be your only guide.

Buy the mill white that will give you the lowest *cost per job* —not the one that just costs less per *gallon*.

But it isn't necessary to pay highest prices, either.

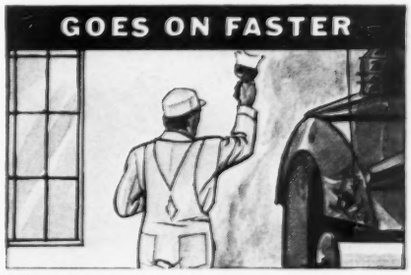
Performance—how quickly it goes on; how far it spreads; how it hides; how long it *stays* white —that's the true measure of painting economy.

Buy the mill white with the *right* balance of these important properties. *That's* the mill white that will give you lowest cost per job and lowest overhead.

● In DULUX, one quality is not achieved at the expense of another. For example, a mill white might have marvelous hiding power but poor spread, thus requiring more gallonage for the job. Or, a mill white might have excellent spread but poor hiding, which would necessitate more coats, longer time to apply.

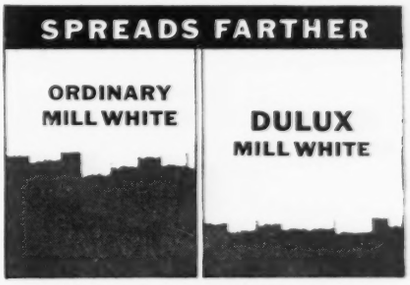
DULUX Mill White has the *right* balance of hiding power, spreading rate, speed of application, and whiteness retention to give you lowest cost per *job*.

The illustrations on the right show just why DULUX costs you least to apply and least to maintain.



DULUX is easier to apply: brushes smoothly without "drag"; flows evenly, is self-levelling, dries quickly. DULUX *saves labor costs.*

The amazing hiding power of DULUX means fewer coats needed for the job. This means you need fewer gallons, and the work is done quicker. DULUX *cuts down material costs.*



Impartial tests prove that DULUX spreads farther per gallon . . . *another saving*, both in less gallonage and in time.

DULUX is amazingly durable. It keeps its brilliant whiteness *longer*. It allows you bigger savings, because it needs fewer repaintings. *For all-around economy*, use DULUX.

DUPONT
DULUX MILL WHITE
REG. U.S. PAT. OFF.
STARTS WHITER · STAYS WHITER

E. I. du Pont de Nemours & Co., Inc., Dept. C 58
Finishes Division, Wilmington, Delaware
Please see that I get full information about DULUX Mill White.

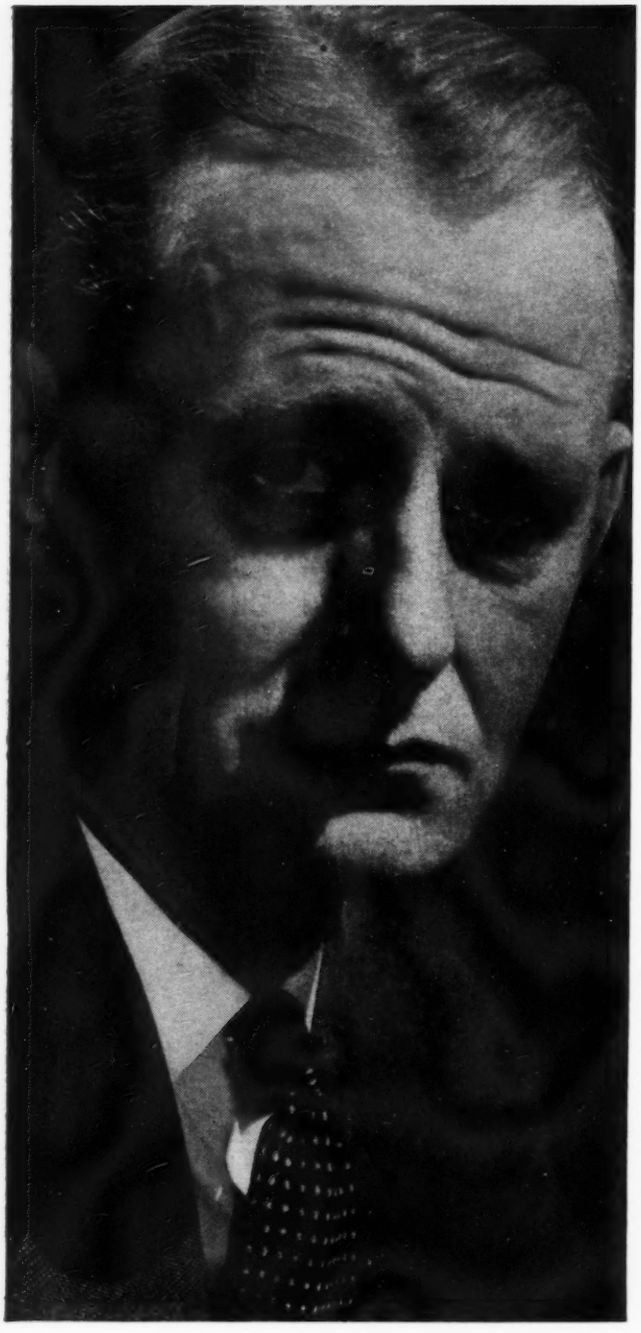
Name.....

Firm Name.....

Address.....

City.....*State*.....

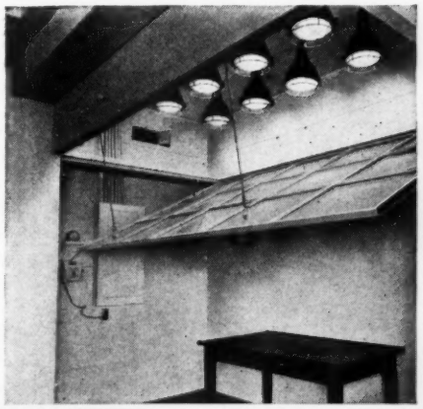
"Sure, I'm a SAD GUY ...sometimes!"



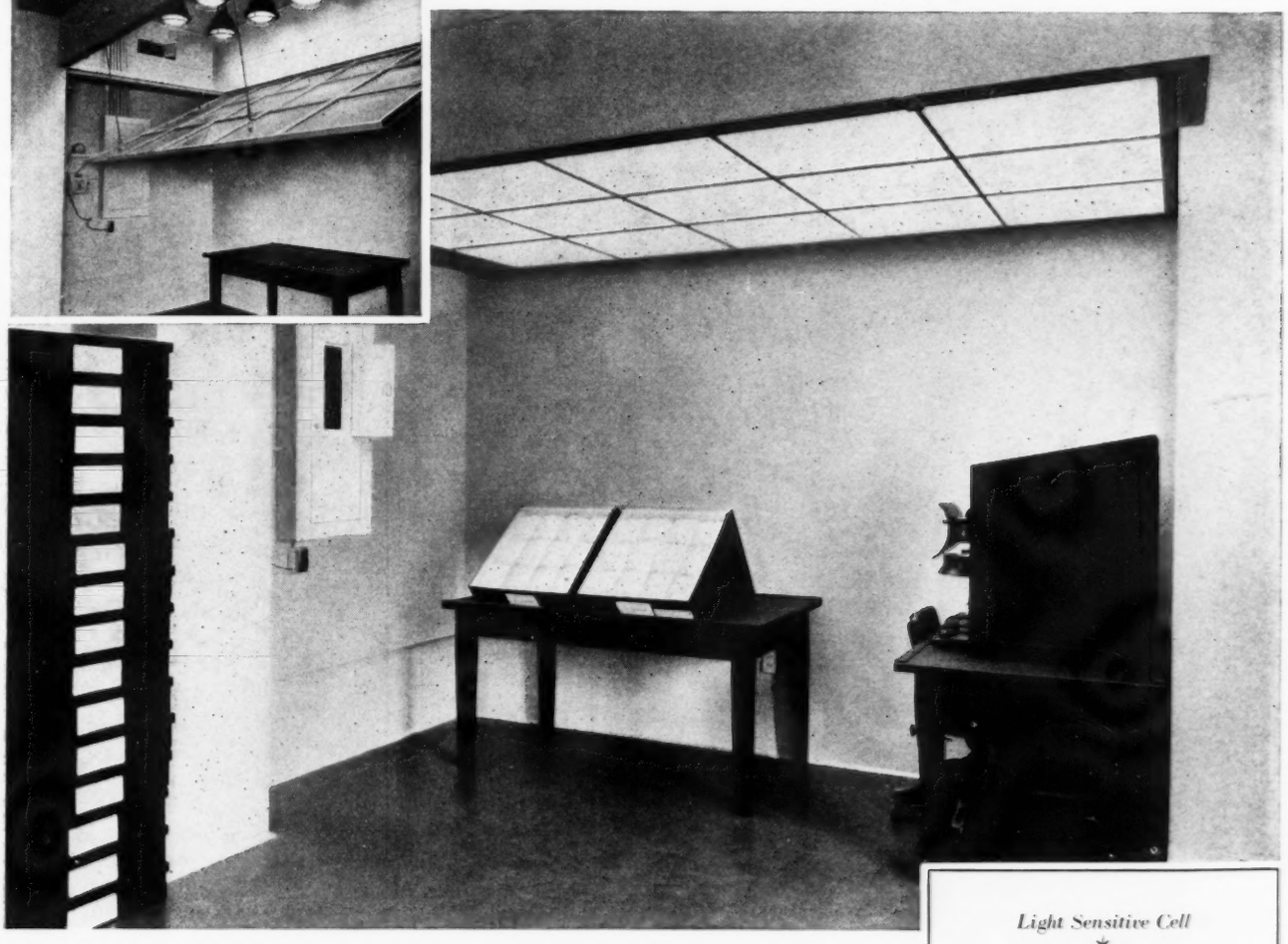
"Many salesmen have bumped into my stock lament that 'business is bad.' Well, sometimes business *is* punk, but usually my grief is just a protective mask that I have adopted to discourage salesmen. After all, I'm a busy man! But when I pick up my copy of COTTON, I am plenty alert. Those editors are specialists in the textile field. They gather useful ideas which, when put to work, create better business and more profit for me. The worse business is, the more I need their help!

"And I read the ads, too, for I know that they are in COTTON because they have something real to offer . . . not because they get editorial publicity. Their representatives stand the best chance of being greeted with a smile in my office!

"The money I pay for my subscription to COTTON is not an expense . . . it's the best investment I make each year!"



●*In this 10′ x 6′ color grading room, fifteen 500-watt* MAZDA *lamps produce 60 footcandles of light at table height. Heat from the lamps is carried away by ventilation behind the glass panels, as shown in the inset photo. (Photos courtesy Bureau of Agricultural Economics)*



HERE'S A LIGHT CONDITIONED COLOR GRADING ROOM!

How artificial daylight is produced with specially designed filters and MAZDA *Lamps made by G-E.*

Thousands of textile mills will be interested in this new daylight room, recently installed by the Bureau of Agricultural Economics in Washington, D. C. This is where color grading of agricultural commodities is carried on under artificial daylight.

Color grading experts appreciate working under artificial daylight that is well diffused over a large area, in sufficient intensity, without excess heat.

The artificial daylight is produced by fifteen 500-watt MAZDA lamps made by G-E, in Macbeth reflectors, each covered with a specially designed filter that changes the incandescent light to light simulating daylight. Glass panels diffuse the illumination so well that this artificial daylight closely matches in color the international standard for "average daylight."

If you plan to light condition your own color matching rooms and other parts of your mills, be sure to use the new, brighter MAZDA lamps made by General Electric. For they give more light at no additional cost for current, and now sell at the lowest prices in history.

For details on light conditioning, write to General Electric Company, Dept. 166-C, Nela Park, Cleveland, Ohio.

FOR MORE LIGHT AT NO EXTRA COST, CHANGE TO THE NEW AND BRIGHTER MAZDA LAMPS MADE BY

GENERAL ELECTRIC

Light Sensitive Cell

With a G-E Light Meter you can measure the lighting in your mill and see whether it meets modern seeing standards. It costs only $11.50.

LAMPS WITH THIS TRADE-MARK STAY BRIGHTER LONGER

DU PONT
TEXTILE CHEMICALS

Acetic Acid
Aluminum Sulfate
Anhydrous Sodium Sulfate
Bichromate of Soda
Caustic Soda
Formic Acid
Glauber's Salt
Lactic Acid
Muriatic Acid
Silicate of Soda
Sodium Hyposulfite
Sodium Phosphate
Sodium Sulfate
Sodium Sulfide
Sulfuric Acid
Tri Sodium Phosphate

● There is a DU PONT chemical for every textile requirement.

Glauber's Salt has been for many years the standard leveling agent for both acid and neutral dye baths. Anhydrous Sodium Sulfate, a more concentrated form, is low in iron, lime and magnesium. It is the recognized extender for dye standardizing.

DU PONT Sulfuric and Muriatic Acids are widely used sours for cotton bleacheries.

To mention a few others—Phosphate of Soda, an assist for kier boiling: Sulfide of Soda, for solubilizing sulfur dyes: Bichromate of Soda for chrome topping improving fastness of color: Lactic Acid, an efficient and economical reducing agent for producing chrome bottoms.

For your textile processing chemicals call DU PONT.

E. I. DU PONT DE NEMOURS & COMPANY, INC.
GRASSELLI CHEMICALS DEPARTMENT
Wilmington, Delaware
Branches in Principal Cities

DU PONT
REG. U.S. PAT. OFF.
Textile Chemicals

NO DANGEROUS CURVES WITH Condor Compensated

PATENTED
TRADE MARK REGISTERED

It "Fits" the Pulley

Condor Compensated on a dry pan drive in a brick plant. 60 H.P. motor running at 865 R.P.M. Note small driving pulley, 8" diameter. Driven Pulley, 48" diameter.

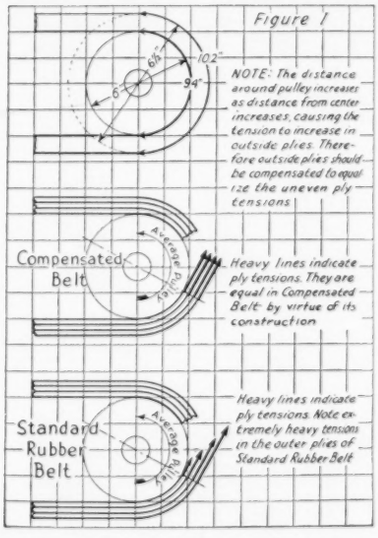


Figure 1
NOTE: The distance around pulley increases as distance from center increases, causing the tension to increase in outside plies. Therefore outside plies should be compensated to equalize the uneven ply tensions
Compensated Belt
Heavy lines indicate ply tensions. They are equal in Compensated Belt by virtue of its construction
Standard Rubber Belt
Heavy lines indicate ply tensions. Note extremely heavy tensions in the outer plies of Standard Rubber Belt

***The Compensated Principle** (above) shows why Condor Compensated Belt lets each ply follow its proper arc around the pulley without strain or buckling.*

Even on smaller pulleys, there are no dangerous curves with Condor Compensated Belt on the drive.

Unlike ordinary rubber belt, Condor Compensated hugs the pulley because its compensated construction equalizes ply stresses. As a result, it conforms to the curvature of the pulley—even on small pulleys—fitting it evenly and snugly throughout the entire arc of contact. There are no ply bulges to "corduroy" the arc of contact . . . causing creep, slip, and loss of power. Nor are there ply rupturing strains on the outside. In addition, because plies are compensated to bear an equal share of the load, fastener wear, ply rupture and separation have been minimized.

In all, Condor Compensated has 12 advantages* that mean real operating efficiency and economy even on the toughest drives. A trial will convince you.

*12 ADVANTAGES

1. Ruptures in outside ply eliminated.
2. Freedom from ply separation.
3. Longer fastener life.
4. Can be operated on smaller pulleys.
5. Less bearing, shafting and hanger troubles.
6. For heavy loads, plies may be increased with same pulleys.
7. Operation less affected by atmospheric conditions.
8. Higher overload capacity or margin of safety.
9. Less wear on pulley side.
10. Can be dressed without injury to belt.
11. High production efficiency.
12. Material reduction in belting costs.

Available also in Type F where rubber friction pulley surface is desired, and Type B where some slip is necessary.

THE MANHATTAN RUBBER MFG. DIVISION
OF RAYBESTOS-MANHATTAN, INC.
EXECUTIVE OFFICES AND FACTORIES, 23 TOWNSEND ST., PASSAIC, N. J.

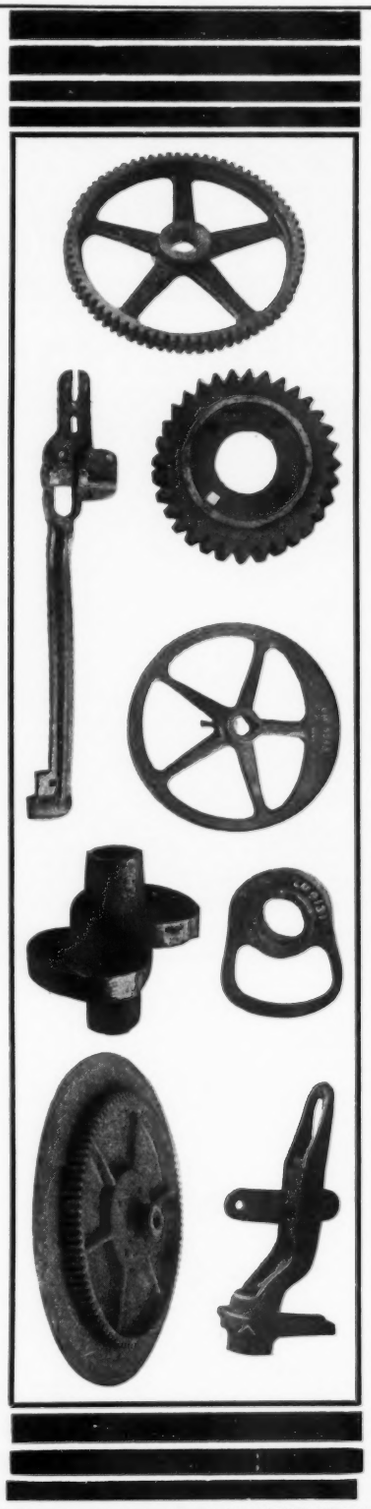
The STEP BY STEP Way To Modernize

TEXTILE MILLS, who desire to modernize, but whose budgets have "short legs", can modernize old machines a step at a time with modern parts. Many antiquated machines can be brought up to almost modern efficiency, part by part, with the aid of accurate fitting, vibrationless, more durable parts. No textile machine, old or new, can operate with modern efficiency if its parts fit imperfectly, wear quickly or break easily. Frequent breakdowns cause a loss in production time that mounts up into dollars.

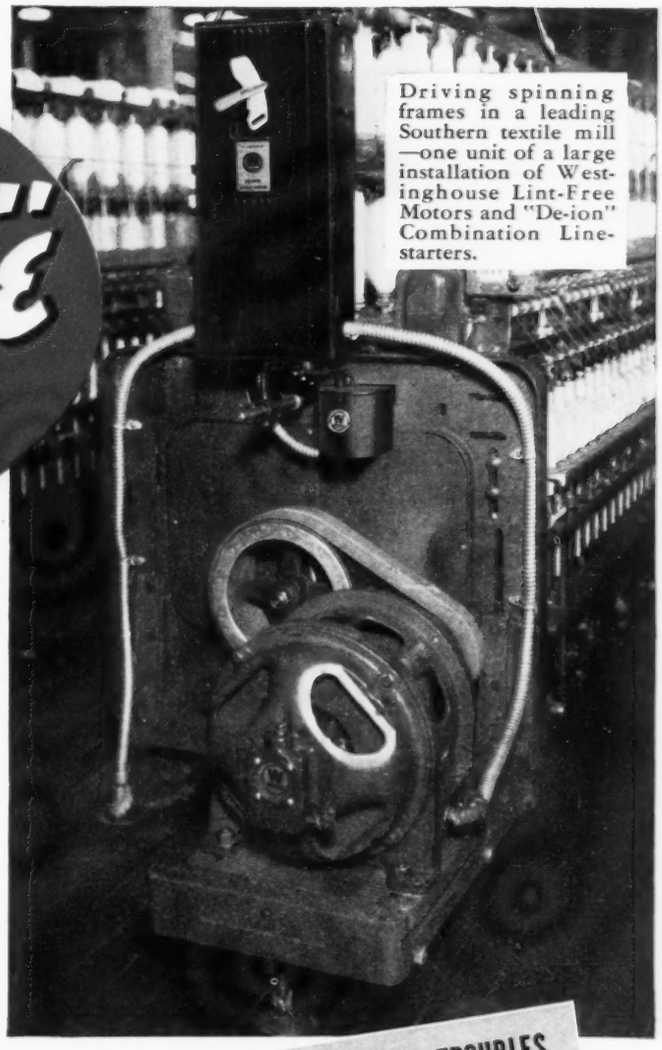
Replace present parts in your machines, part by part, step by step, with HENDERSON Textile Repair Parts. Their precision accuracy and perfect fit is due to precision patterns and careful workmanship. They have greater strength at the points where ordinary parts wear and break because we have made a study of present-day equipment and know where to reinforce at these weak places.

Here's one way to modernize your machinery at the least expense. Let us quote you on one or any number of parts for any make of textile equipment. Write us today.

HENDERSON FOUNDRY & MACHINE WORKS
HAMPTON, GEORGIA



YOU PROFIT FROM MORE "Mileage"



Driving spinning frames in a leading Southern textile mill—one unit of a large installation of Westinghouse Lint-Free Motors and "De-ion" Combination Linestarters.

IN WESTINGHOUSE LINT-FREE MOTORS

The serious problem of lint protection on motors, driving spinning frames, roving frames and other textile machinery has been met by these four features of Westinghouse Lint-Free Motors, which insure long trouble-free service:

1. Specially shaped rotor vanes circulate air through the motor at proper velocity to remove lint.
2. Glass-smooth windings prevent lint from clinging.
3. All air passages are extra large.
4. There are no screens to require cleaning.

For information about these and other advantages of Westinghouse textile machinery drives, call or write your nearest Westinghouse Office or Industrial Agent.

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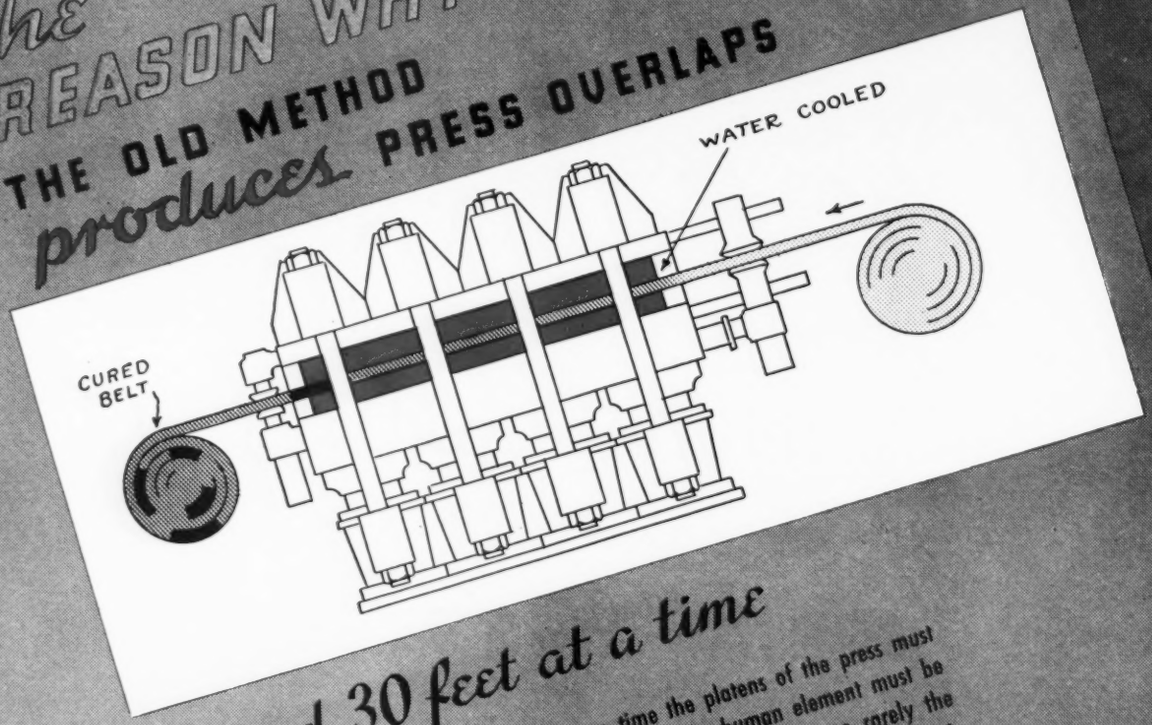
The REASON WHY

THE OLD METHOD *produces* PRESS OVERLAPS

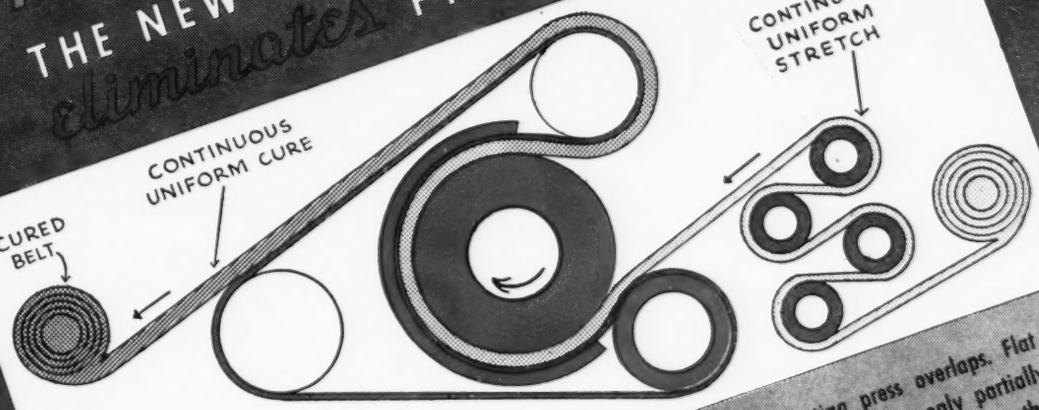


Vulcanized 30 feet at a time

When only 30 feet of belt can be cured at one time the platens of the press must be raised and the next 30 feet drawn into the press. The human element must be depended upon; yet it is true that operations manually performed are rarely the same when repeated. When placed in the press ready for vulcanizing, the belt is supposed to be stretched a definite percentage. Careful control of this stretching is essential; otherwise the belt may stretch abnormally or even break in service. The accuracy of this control depends on the conscience and alertness of the operator. Nevertheless he is expected to open the press at exactly the right minute, pull the belt exactly the right distance, and stretch the belt the exact number of inches. On all belts made in the platen press there is at the end of each press length a narrow section which is vulcanized twice, with resulting distortion and injury of fabric, and since over-vulcanization is destructive we now have a belt with injured strips— three potential defects in approximately every 100 feet of belting. Such a belt is partially crippled when it goes on the drive. The result: a variable stretch factor and a definite decrease in resistance to flexing and ply separation in service.

BOSTON WOVEN HOSE

The REASON WHY THE NEW METHOD eliminates PRESS OVERLAPS

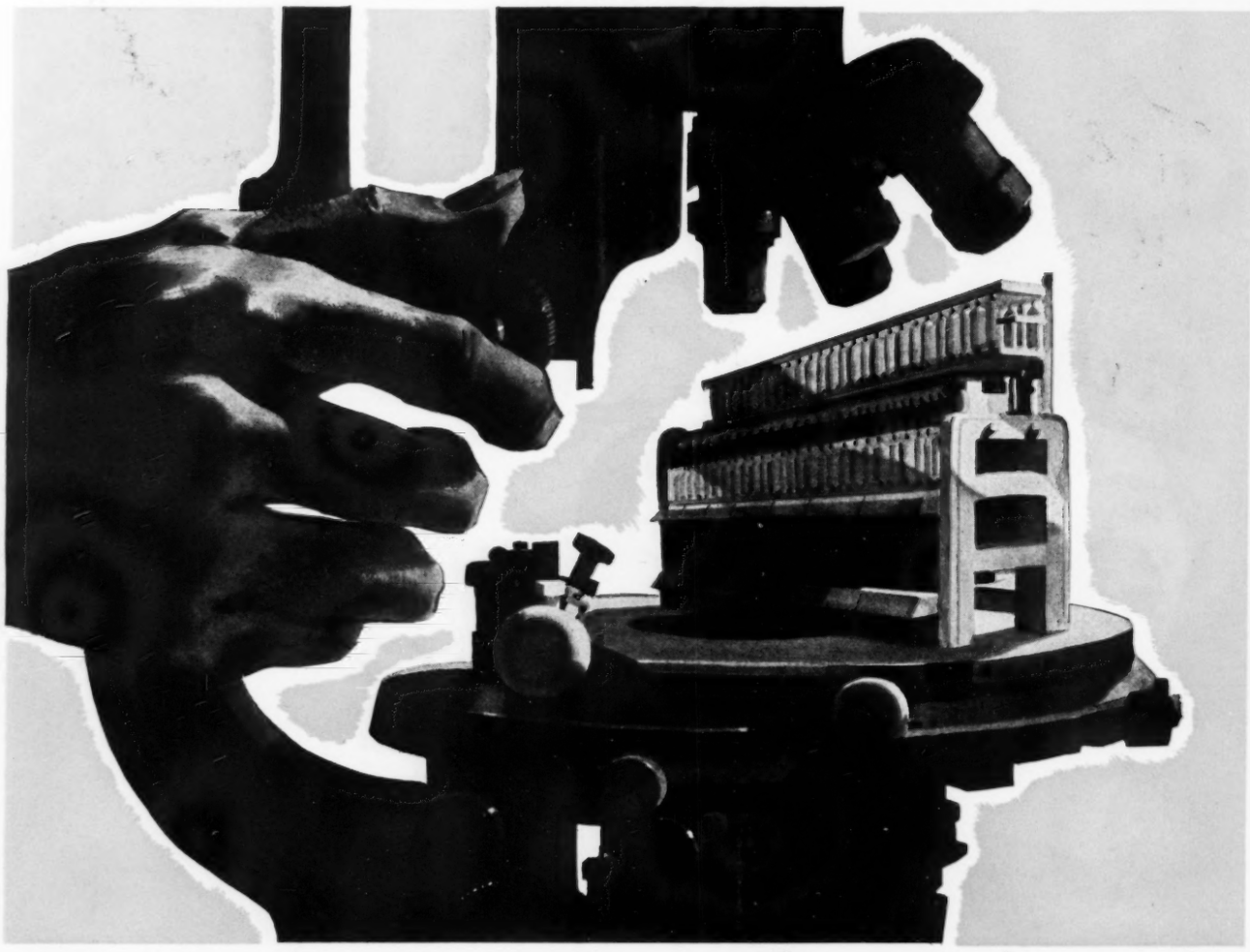


Manufacturers of rubber belting have tried many methods of eliminating press overlaps. Flat presses equipped with water-cooled ends were developed, but the difficulty was only partially overcome because, with the most skillful operators, over-vulcanization still prevailed. Another expedient was to so change the compounding of the rubber as to minimize the effect of over-vulcanization, but here again the device was a makeshift rather than a solution, with the result that the difficulty remained unsolved.

The B W H Rotocure Process of Continuous Vulcanization is the only practical method of producing uniform rubber belting entirely free from press overlaps. It solves the problem because the belting is processed on an exclusive patented rotary type of press, radical in principle. It substitutes uniformity for variation by making the vulcanizing process automatic instead of spasmodic. Uniformity results not from the skill or experience of the operator, but from the unvarying precision of the machine. The result: a uniform belt uniformly vulcanized and uniformly stretched, that will give uniform service.

one continuous operation

& RUBBER COMPANY



They took their Spindles to the Lab!

Shell Textile Lubricant proves superiority in test conducted by Southern mill*

OPERATORS of a prominent Southern textile mill were dissatisfied with their spindle lubricant. Operating 35,000 spindles and about 1,200 looms, the company felt that power was being wasted and costs increased by inefficient lubrication.

Shell engineers were brought in, suggested a series of tests involving the best spindle oils on the market. *They figuratively took this company's spindles to the laboratory.*

Power tests were run on four spinning frames of 252 spindles each. Yarn production was checked at the same time. Tests ran 220 hours on each of the spindle lubricants.

The results showed the unquestionable superiority of the Shell Spindle Lubricant. Not only did the proper Shell Lubricant show less power consumption and lower frictional heat than the other lubricants tested, but the tendency to "throw" and creep up the spindle was notably absent. As a result of these conclusive tests, Shell products now lubricate this mill 100%!

Whatever *your* lubrication problem, call on Shell to help you solve it. A long series of successes like the one above prove that Shell gets results. The finest lubricants being refined, the "know how" to apply them—are a mighty big *plus* in lubrication. These are yours for the asking. Simply call or write your nearest Shell office.

*Case history No. 307 from Shell's files

Shell Textile SHELL *Lubricants*

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MAY 17 1938

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VOL. 102 — MAY, 1938 — NO. 5

COTTON
SERVING THE
Textile Industries

In This Issue

Editorial—

National Cotton Week ---- 84
Cotton Towels for Cotton Mills ---- 84

General and Technical—

An Editorial Estimate of Textile Trade Associations ---- 61
The Cotton-Textile Institute, Inc., by Claudius T. Murchison ---- 63
Interests of Southern Mills Constitute Chief Activity of the American Cotton Manufacturers Association, by W. M. McLaurine ---- 65
New England Mills Served by National Association of Cotton Manufacturers, by Russell T. Fisher ---- 67
Southern Textile Association Serves Textile Operating Executives of Mills, by Edwin M. Holt ---- 69
Association of Cotton-Textile Merchants, Born of Emergency, Now an Essential Agency, by W. Ray Bell ---- 70
Research—a Need of the Industry and an Objective of the AATCC, by Alban Eavenson ---- 71
The National Association of Wool Manufacturers, by Arthur Besse ---- 74
Lisle Hosiery is Current Drive of Durene Association, by Dean Hill ---- 76
National Federation of Textiles, Inc., by G. H. Conze ---- 77
Young, but Effective, the National Rayon Weavers Association, by Charles Whitney Dall ---- 78
The U. S. Institute for Textile Research, Inc., by Charles H. Clark ---- 80
Stop on Red—Go on Green (A Biography of the New President of the American Cotton Manufacturers Association) ---- 85
American Association's Augusta Meeting Is Stimulating and Enjoyable Event ---- 88
Carding and Spinning Questions Debated at Greenville Meeting of STA ---- 91
Spun Rayon Is Topic of Interest at Danville Meeting ---- 94
Carding, Spinning, Cotton, Safety, Discussed at Gastonia Meeting ---- 96
Making Shrinkage Charts for Piece Goods, by William T. Leggis ---- 98

Current Textile Topics—

Talk of the Month ---- 100
Evolution of Mill Control ---- 100
New England Mill Situation ---- 100
"The Situation"—As Seen Across an Executive's Desk ---- 101
What the Southern Mills are Doing ---- 104
New Publications of Textile Interest ---- 106
New Textile Equipment and Materials ---- 108
Timely News Items With a Textile Slant ---- 116
Obituary Items ---- 118
Personal Notes About Men You Know ---- 120
Comment on the Cotton Market ---- 135
An Old-Timer Says ---- 123

How Other Men Manage—

Comb Box Lubrication ---- 128
Sizing Colored Warps ---- 128
Dirty Card Flats ---- 128
How Do You Set Pickers? ---- 129
Higher Band Breakage ---- 129
Speed of Fly Frames ---- 129
Life of Loom Parts Compared ---- 131
Questions on Grid Bars and Blending Process ---- 131

Knitting Section—

Hosiery Industry Effectively Served by its National Association, by Earl Constantine ---- 141
"Trade Associations Preserve Business Integrity"—a Discussion of the Underwear Institute, by Roy A. Cheney ---- 143
The Outerwear Industry, by Harold R. Lhowe ---- 145
Southern Hosiery Mills Have a Young but Profitable Trade Organization, by P. W. Eshelman ---- 146
Report of the Knitting Exhibition and Conventions in Philadelphia ---- 147
Trends and Highlights in the Knit Goods Markets ---- 155
An Eye on the Knitting Mills ---- 165
Review of the Yarn Markets ---- 166

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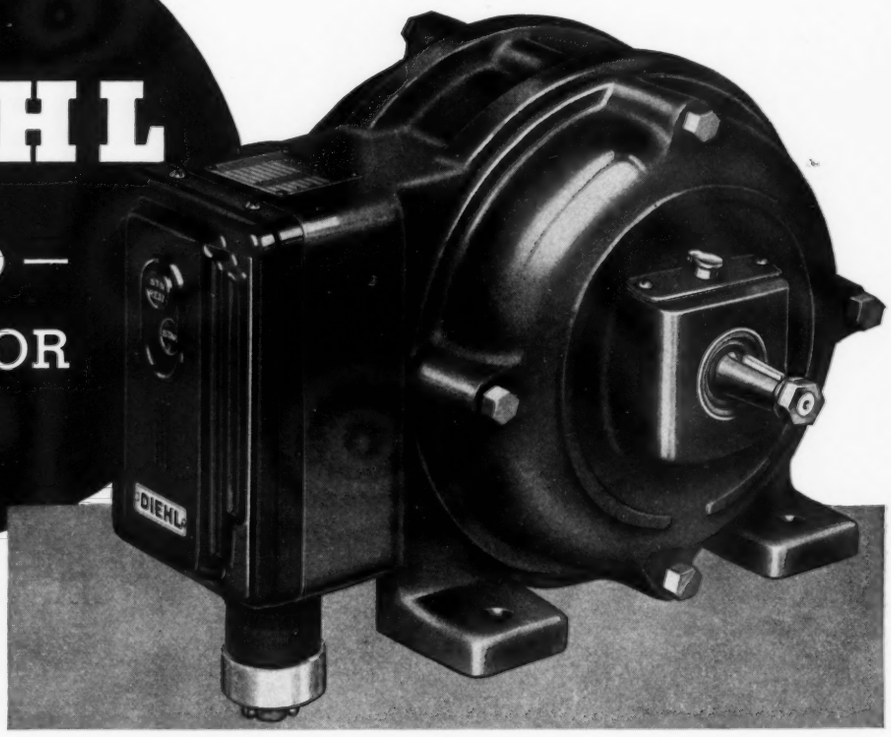
DIEHL

UNIFIED — TEXMOTOR



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Investigate the merits of this development for application to your new looms, or for replacements on existing equipment.

SWITCH FEATURES

Three pole; push button operated; quick make-and-break; twin-break silver-to-silver contacts—no pigtails; safety catch prevents unauthorized operation; all metal parts rust-proof—cadmium plated; mechanism mounted on rubber preventing loosening of connections due to vibration; eutectic thermal overload protection—free-tripping type; overload relay—after tripping, reset by merely pushing button; interchangeable for all horsepower sizes within rating by changing thermal heater coils.

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Totally enclosed; dust sealed, waste packed sleeve bearings which require little maintenance; tapered shafts permit ready mounting and dismounting of pinion; operating characteristics meet all modern requirements for high power factor and efficiency; cool in operation; adequate starting torque with high inertia rotor; ample overload capacity; special mechanical or electrical modifications obtainable for large installations.

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SHORTS AND REMNANTS

"Smile When You Say That, Pardner"

". . . And furthermore, if articles in your magazine are written by such people, it is a clear indication that your magazine is not worth the paper on which it is printed."

R. D. Wilson.
Rufus D. Wilson Inc.
Burlington, N. C.

("How about trying your hand at an article, Mr. Wilson?")

◆

The Latin's In Again

"Here i come for more worry, but what these (D) Latins dont figure out and want, is not in the world, one city in Peru have ask me, for a complete, installation for Hospital, & Hotel Laundry, Electric Oven Bakery, Dry Cleaning outfit for suite Dresses and Hats, Electric Steam Boiler, Complete Instalation for Pasteurizing Milk on Dary farm, Instalation for purefyding drinking water, i have all the above mentioned.

"But the City want this, (Una Instalacion Completa Para La Industria de Preparer i secar Orejones) The is the same in englis, (A Complete instalation to prepare and cut and dry Peaches) Now when i left Georgia 20 year ago we just taken a knife and pealed & cut the peaches and put out in sun to dry, not if you al K K K know where and who make a instalation to preparar i secar Orejones) The is the same in them rush out by air mail the prices and picture circulars.

"Well see what you can do, as it serving the old Cause i have sisters and one Son in U. S. A. is almost in Bread line, but i get them a little money out of Peru each month, (Not for Food But Possible Gasoline for a Hudson, gee what a world) so thanks Again."

Geo. M. Slayton
Slaytons Agency
Lima, Peru

◆

Slander if You Must But Please Don't Ignore

"Our principal reason for not renewing our subscription to your magazine, COTTON, is that no one ever reads it, and in fact rarely takes it out of the original wrapper.

"We have for years subscribed to one or two other magazines published in the East and feel that these magazines supply our various wants satisfactorily."

W. F. Flaherty
Treas. Great Barrington Manufacturing Co.
Great Barrington, Mass.

(No matter how delicious the candy, you do have to take the lid off to get to it.)

◆

"I am in receipt of your favour of the 8th inst. also the 1934-5-6 issues of the Cross Index to COTTON.

Please accept my thanks for these publications, which make easy the locating of desired subjects."

H. W. BROOMFIELD
Cornwall & York Cotton Mills Co., Ltd.
Saint John, N. B., Canada.

Early American Textiles

The actual beginnings of American textiles, and (in percentage at least) the most rapid development of any period in the industry is mentioned in "A New American History" by W. E. Woodward as follows: ". . . If Englishmen could make a pocketknife or weave a bolt of cloth, why could not Americans make them too?

"The growth in manufacturing industries was phenomenal. In 1807 there were only 8000 spindles in the American textile industry; by 1915, there were 500,000."

A lot of machinery and equipment salesmen will wager that they can tell you some mills who are still running some of those spindles.

◆

Educational Course

"Replying to your letter of April 2d, we wish to thank you for the material recently sent to us.

"We have not completely formulated our educational course but this information will be very helpful in making this possible."

H. V. W. Scott
Van Raalte Company
Paterson, N. J.

◆

"Fixing Looms" Reprints

"Please advise the best price you can make us on 25 copies of METHODS OF FIXING LOOMS."

H. W. Hunter
Sec. & Gen Mgr.
Proximity Manufacturing Company
Greensboro, N. C.

◆

Greenville Show Hours

Announcement of the 13th Southern Textile Exposition for the Textile Hall at Greenville, S. C., April 3-8, 1939, carries with it a change in opening and closing hours as follows:

	Open	Close
Monday	**11:00 a.m.**	**9 p.m.**
Tuesday	**9:30 a.m.**	**9 p.m.**
Wednesday	**9:30 a.m.**	**9 p.m.**
Thursday	**9:30 a.m.**	**9 p.m.**
Friday	**9:30 a.m.**	**9 p.m.**
Saturday	**9:00 a.m.**	**4 p.m.**

COTTON readers may recall "Change of Hours for Textile Show—How Will You Vote?" on page 74 May 1937 in which a change from the former "10 to 10" to 9 a.m. to 7 or 8 p.m. was advocated and comments invited. Judging from comments received the new hours will be a step in the right direction—pleasing to both exhibitors and mill men attending.

Old Timer's Philosophy

"Enclosed is copy of a poem by Henry Van Dyke that reminded me of OLD-TIMER when I read it. Perhaps you know it but I thought if you did not you might like to read it as it seems to me to express in excellent words the philosophy of the OLD-TIMER."

PAUL SEYDEL
Seydel-Woolley & Co.
Atlanta, Ga.

THE ZEST OF LIFE

Let me but live from year to year,
With forward face and unreluctant soul,
Not hastening to, nor turning from the goal;
Not mourning for the things that disappear
In the dim past, nor holding back in fear
From what the future veils; but with a whole
And happy heart, that pays its toll
To youth and age, and travels on with cheer.
So let the way wind up the hill or down,
Through rough or smooth, the journey will be joy;
Still seeking what I sought when but a boy,
New friendship, high adventure, and a crown,
I shall grow old, but never lose life's zest,
Because the road's last turn will be the best.

HENRY VAN DYKE

◆

Department Consolidations

"Sometime during the year 1936, I asked you to publish in your COTTON magazine an article for me regarding consolidating some departments in our plant. You were good enough to do this for me and I received some nice articles from some of your readers in favor of this change. The change-over is now well under way and I think that everyone around the plant is going to be proud of it when it is completed.

"I want to express to you my appreciation for your assistance in this matter."

S. L. Mavity
Supt. Richmond Hosiery Mills
Rossville, Ga.

(Consolidation of departments in seamless mills was discussed pro and con in COTTON in Sept., Oct. 1936; March and May 1937.)

◆

Still Cross Indexes

"We would appreciate your sending us your Cross Indexes of COTTON for the years of 1935, 1936 and 1937."

Hockmeyer Bros., Inc., Waterhead Mills Dept.
Lowell, Mass.

◆

"We note on page No. 43 of the magazine 'COTTON' for the month of January 1938 that you have prepared a Cross Index of all the leading articles and practical discussions published in 'COTTON' during 1937, and that copies would be sent to any reader requesting it. We shall therefore be obliged if you would forward us a copy. This will surely be useful. Thanking you in anticipation."

J. Christie
Mgr. S. A. Fabrica Uruguaya de Alpargatas
Montevideo, Uruguay

(Requests for cross indexes continue. These are furnished without charge.)

REPUBLIC STEEL
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BERLOY
TRUSCON
NILES STEEL PRODUCTS
ELECTRUNITE TUBING

You may know Republic Steel for its high quality in sheets—or pipe—or alloys—or ENDURO Stainless Steel—but, Mr. Manufacturer, Republic produces a wide diversity of steels and steel products.

Republic is the world's largest producer of alloy steels. Republic offers the most complete line of tubular goods of any single producer. Republic has grown rapidly to the point where now it is one of the three largest steel producers in the country.

For quality, dependability and assistance in working out your problems concerning the application of steels, it will be to your advantage to think first of Republic Steel Corporation, Cleveland, Ohio.

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PRODUCTS OF STEEL AND TUBES, INC. THAT YOU SHOULD KNOW ABOUT—
ELECTRUNITE Boiler and Condenser Tubes — ELECTRUNITE Mechanical and Structural Tubing — ELECTRUNITE ENDURO Stainless Steel Tubing — ELECTRUNITE Steeltubes Conduit.

COTTON
SERVING THE
Textile Industries

May 1938 Vol. 102 No. 5

An Editorial Estimate of Textile Trade Associations

"TRADE ASSOCIATIONS have become an integral part of American business." With that simple but concise statement, W. J. Donald, vice-president of the American Management Association, begins his book entitled, "Trade Associations", published in 1933. And it is particularly applicable to the textile industry, for its various trade organizations have grown to be important factors in formulating and executing the policies of the several divisions of this extensive manufacturing enterprise.

So it is appropriate that the special section in this issue of COTTON should be devoted particularly to the textile trade associations, in order that the individual members of the industry may acquire a broader prospective of their trade organizations as a whole, and a better understanding of the functions and purposes of those associations which have been established and dedicated for service in their behalf.

THIS DEFINITION of a "trade association" is given by the American Trade Association Executives:

"A trade association is an organization of producers or distributors of a commodity or service upon a mutual basis for the purpose of promoting the business of their branch of industry and improving their service to the public through the compilation and distribution of information, the establishment of trade standards and the co-operative handling of problems common to the production or distribution of the commodity or service with which they are concerned."

In the foreword of a book on trade association activities published in 1927 by the United States Department of Commerce, Herbert Hoover, then secretary of that department, made this general statement with respect to trade associations and their place in American business and industry:

"In the field of scientific and economic research, in statistics, in simplification and standardization of commodities, in the promotion of arbitration in commercial disputes, in development of foreign trade, and in scores of other directions, trade associations have made a valued contribution to our economic progress.

"While our industry and commerce must be based upon incentive to the individual, yet the national interest requires a certain degree of co-operation between individuals in order that we may reduce and eliminate industrial waste, lay the foundation for constant decrease in production and distribution costs, and thereby obtain the fundamental increase in wages and standards of living.

"Within the last few years trade associations have rapidly developed into legitimate and constructive fields of the utmost public interest and have marked a fundamental step in the gradual evolution of our whole economic life."

Though Mr. Hoover made those observations a decade or more ago, they can be applied with equal accuracy and emphasis, now, to the several trade organizations that have grown up in the textile industries.

AT LEAST one of these associations described in the following pages can trace its history back to pre-Civil war days. Others may point with equal pride to long periods of useful service in behalf of those divisions of the industry for which they were created. Still others have been born of necessity during these more recent years when changes in our social, economic and political affairs have created the demand for new agencies to render new services in new fields of business and industrial enterprise.

Admittedly, there is overlapping and duplication of service and effort, but so it is in government and religion and education, and in every other field of human endeavor. Perhaps some economist—or "brain truster"—might be able to reorganize the trade association set-up of the textile industries and effect greater efficiency and economy in their operation, and that would be desirable. No doubt, some deadwood could be cut out and the industry might benefit through the elimination of some organizations that have served their purpose or whose functions have been assumed by others. But by and large the textile trade associations are rendering a valuable and useful

service to their members by co-ordinating their efforts in matters of mutual interest; by interpreting their industries to the general public; by representing their respective groups in their ever increasing relations with various governmental agencies, and by performing specific services for their members individually and collectively.

In this issue of COTTON an effort is being made to present a picture of textile trade associations in their broader fields of activity. It would be impractical to attempt to cover the entire trade association organization of the industry as a whole because of the multiplicity of such agencies—national, sectional, divisional, state, and even local. But those whose stories are presented will give the readers of COTTON an intelligent cross-section of the textile industry.

THE TEXTILE INDUSTRY is particularly adaptable to trade association organization, because it is made up of so many separate and distinct divisions and these are in turn composed of so many relatively small units. Of necessity there must be established agencies through which these individual units may take co-operative action and through which the major divisions may bring about co-ordination in their inter-related activities.

The last few years have fully demonstrated the value of trade associations to the textile industry, and that value lies not so much in what these organizations have been doing in their regular activities but in the fact that they were established and functioning agencies, ready to deal with the many emergencies that have arisen during this period of social, economic, and political evolution—or revolution, if you please. As one trade association executive has expressed it, their "readiness-to-serve" constitutes their greatest value.

To enumerate all the activities of all the textile trade associations would be impossible, and to mention only a few may tend to discount the relative importance of others of equal value. But an intelligent appraisal of textile trade association work would not be complete without calling attention to some of the major fields of endeavor in which these agencies are rendering useful service to their members. These would include public relations, industrial relations, protection against adverse legislation, interpretation of government rules, regulations and policies, trade practices, transportation and freight rates, controlling production and stocks to conform to demand, cost accounting, sales contracts between mills and their customers, arbitration, purchase of raw materials, standardization, personnel training and education, technical research, economic research, technical education, compilation and dissemination of statistics and other pertinent information, market research, sales promotion, foreign trade and competition, taxes, insurance—and literally hundreds of other activities and services of more or less importance.

The effectiveness and the influence and prestige of a trade association is in direct ratio to the extent to which it is actively supported by the members of that division of the industry which it represents. Therefore, its maximum usefulness can only be achieved when every unit within that division takes an active part in the association work.

Fortunately, for the textile trade associations, there are relatively few individuals who are so short-sighted and so selfish as to fail to co-operate with their fellow-manufacturers in matters of common interest. Most manufacturers realize that, individually, they neither could nor would devote the necessary amount of time and effort that would be required to provide the services which their trade associations perform collectively for them; and, they also realize that their associations perform these services much more efficiently and more economically than could be accomplished through individual effort. As a result the textile trade associations are generally well supported by the members of the industry and this widespread co-operation has made possible the efficacious services which these organizations are rendering.

So COTTON salutes the textile trade associations and the diligent and aggressive executives who direct the activities of those organizations. And COTTON pays tribute to the individual manufacturers whose leadership and loyalty and co-operation have developed a system of trade associations that effectually co-ordinate the various sections of the textile industry and that give direction to the efforts which textile manufacturers are making, individually and collectively, to cope with the many serious problems with which the industry seems destined to be constantly confronted.

Index of Textile Trade Association Articles

The specially contributed articles dealing with some of the major leading trade associations in the textile industry, which appear in two special sections in this issue of COTTON, are as follows:

The Cotton-Textile Institute, Inc., by Claudius T. Murchison ---page 63
American Cotton Mfrs. Association, by W. M. McLaurine ---page 65
National Association of Cotton Manufacturers, by Russell T. Fisher ---page 67
Southern Textile Association, by Edwin M. Holt---page 69
Association of Cotton Textile Merchants of New York, by W. Ray Bell ---page 70
American Association of Textile Chemists and Colorists, by Alban Eavenson ---page 71
National Association of Wool Manufacturers, by Arthur Besse ---page 74
Durene Association of America, by Dean Hill ---page 76
National Rayon Weavers' Association, by Charles Whitney Dall ---page 78
U. S. Institute for Textile Research, Inc., by Charles H. Clark ---page 80
The National Federation of Textiles, Inc., by G. H. Conze ---page 77
National Association of Hosiery Manufacturers, by Earl Constantine ---page 141
Underwear Institute, by Roy A. Cheney ---page 143
National Knitted Outerwear Association, by Harold R. Lhowe ---page 145
Southern Hosiery Manufacturers Association, by P. W. Eshelman ---page 146

The Cotton-Textile Institute

Its Record, Its Challenge, and Its Opportunity

By CLAUDIUS T. MURCHISON

President, The Cotton-Textile Institute, Inc.

BOUNDLESS as the sea; varied as the moods and impulses of a troubled world. Such are the activities and responsibilities of The Cotton-Textile Institute. It is difficult to classify or enumerate them as of yesterday—it is impossible to do so as of tomorrow. They defy fixation because the industry itself defies fixation. Only one thing is constant: the fundamental, underlying purpose as stated in the articles of incorporation — *"to promote the progress and development of the cotton industry."*

Just as the industry is a variable in the character of its internal problems, it is likewise a variable in the nature of its changing relationships to the economic and political system within which it functions. In consequence, as we move from one stage to another, Institute activities which were formerly regarded as novel and daring are either abandoned or relegated to matter-of-fact routine, while new challenges rise up on the firing line to replace them.

Less than ten years ago, it will be recalled with a somewhat reminiscent smile, the Institute was launching its startling and boldly progressive "55-50" campaign, the doctrine of industry-wide co-operation in production regularization and a program of uniform, scientific cost accounting. The echoes of these pioneer efforts were still ringing when the Blue Eagle swooped. Again the pioneer in Code formulation and enforcement, the Institute was given the weapons of power.

A new wage-and-hour structure was built; labor relations were changed; production volume was subjected to allotment and control; prices and marketing operations were to a large extent regulated; full statistical reporting was required, and so *ad infinitum.* As Code Enforcement Authority The Institute was fact finder, analyst, advocate, judge, jury and policeman.

Of all this, what is left? All legal power has gone; the right of supreme judgment has passed; every phase of compulsion has disappeared; the relationships and the methods have departed.

But the heritage is not one of memories only. Certain concepts, certain values, certain practices have lingered through spontaneous voluntary acceptance *as accomplished facts.* Such are the 40-hour week, the double shift, the elimination from employment of persons under 16, the maintenance of a wage not less than the code minimum, and the continuation by a great majority of statistical reporting. The Institute aids in keeping alive the spirit of allegiance to these things. But it is a duty which is taken for granted. It is no longer a matter of missionary effort. It is not adventure of crusade. It is *routine.* The industry standards and practices which survived the NRA have, since the first few months following the invalidation, come to be regarded as *established points of reference.* They are just another set of starting marks for the industry's thoughts and policies, whatever may be the next direction of our going.

Three Major Objectives for Future

As to future major accomplishments, I have learned conclusively from a none too lengthy experience in the industry the dangers of prophecy. But my present conviction is that for the next few years the Institute, in active co-operation with the industry's other associations, will center its attention largely upon three great objectives.

Adjusting Supply to Consumption Requirements

The first of these is to procure a more effective adjustment of supply to current consumption requirements. I have used the term "consumption requirements" advis-

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DR. MURCHISON, at his desk in the New York office of the Institute

• *The officers of The Cotton-Textile Institute, besides Dr. Murchison, are: G. H. Dorr, chairman; John H. Cheatham, Georgia-Kincaid Mills, Griffin, Ga., and Charles F. Broughton, Wamsutta Mills, New Bedford, Mass., vice-presidents; and Paul B. Halstead, secretary-treasurer. Executive offices are at 320 Broadway, New York City, and Investment Building, Washington, D. C.*

edly, because from the viewpoint of mill executives the alternative word "demand" is misleading and illusory. It expresses itself in the primary market only, is subject to forces of confusion and speculation no less than the conditions of supply and hence is no dependable barometer for the guidance of general production policies. True demand has its existence beyond the primary markets and embraces the flow of goods into actual consumption.

Hitherto the statistical information essential to a knowledge of the true status of consumption has been almost wholly lacking. A broader statistical coverage must be had, inclusive of the operations of converters, cutters, wholesalers and the more important retail distributors, if the guess-work is to be removed from the adjustment of supply to consumption requirements. Until this is done, no great progress can be made in the regularization of production and employment. The values, human and financial, which are at stake in this need for greater industrial stability will not permit of continued indifference or inaction. There is already evidence that the log jam has been broken and further progress seems assured.

Broadening the Field of Consumption

The second great objective upon whose attainment all hands should unite, is a broadening of the field of cotton consumption. The development of new uses as well as a widening of the old, if the industry is to hold its own against the inroads of the youthful giants—rayon and paper. Here is involved not only the welfare of the industry with its employees and communities, but also that of southern agriculture. Under the handicap of limited resources, the Institute has striven desperately, and with promising results, for new outlets.

Within the past year new support has been enlisted from shippers, organized growers and a limited number of warehousemen and brokers, in connection with our "cent-a-bale" program. Financial receipts have suffered greatly from the current decline in mill buying of cotton, but the disheartening effects of this have been overcome by the appearance of a new and powerful ally in the form of the chain stores. These great chain systems which normally account for more than half of the total sales of cotton goods in the United States have united with the cotton growers' co-operative associations, the southern Commissioners of Agriculture and the Cotton-Textile Institute to form a joint promotional organization known as the Cotton Consumption Council. Its purpose is not only to deal with the present cotton surplus emergency, but to engage permanently in the advancement of cotton and its products.

Stopping an Increase in Third Shift Operations

The third objective which will probably require unceasing industry attention is to preclude the expansion of third-shift operations. A general adoption of the third shift will not enlarge the industry's total output, will not increase its profits, or add to the number of its employees, or enhance wages, or magnify the industry's contribution to the general social and economic good. On the other hand, so long as the period of third-shift expansion lasted, the industry would retread the path of excess production, distress prices, forced insolvencies and surplus machinery liquidation. All will be gainers, with no losers, if present majority opinion prevails in the preservation of the double-shift standard.

The industry problems and objectives just recounted originate within the industry itself, or in its normal competitive relationships. They are numerous and demanding enough, but fall far short of accounting for all Institute activities and responsibilities.

The industry cannot escape the impact of forces which exert themselves through politics and government and foreign competition. Grappling with these outside disturbances has imposed upon the Institute as well as the other associations an increasing range of duties and activities not dreamed of 10 years ago. Unceasing vigilance and struggle have been necessary to fend off or modify the unending series of repressive legislative measures.

Those who participated in the defense against the windfall tax as at first framed can never forget the arduous and anxious weeks of labor required to win final acceptance of an act which came within the bounds of reason. Equally vivid are the memories of the encounters with the Ellenbogen Bill which, after all its defeats, still smolders in sinister hope. The months of combat on front, flank and rear, with the Black-Connery wage-and-hour measure and its threatened successors are current history. Coping with the ill-fated undistributed surplus tax and, more recently, with its ill-begotten offspring—the "third basket"—was another phase of the general conflict. The processing tax, always rearing its head, called for one bludgeoning after another. And the end is not yet.

But legislation in the making is not the whole of the worry. After enactment comes interpretation and enforcement with results not always anticipated even by Congress. After the Walsh-Healy Act were hearings and petitions for modifications of, or exemptions from rulings and interpretations of the Department of Labor. Arguments and decisions on textile wage determination under this Act still lie ahead. Frequent consultations, inquiries and petitions still abound in connection with processing tax and windfall tax settlements and returns under legislation which is two years old.

The Reciprocal Trade Agreements Act is almost four years old and yet only now have we come to our most severe test under the law, with final results which cannot yet be foreseen. Important and continuing relationships are maintained with the Department of Agriculture in connection with cotton

(Continued on page 75.)

Southern Mills' Interests Constitute Chief Activity of

American Cotton Manufacturers Ass'n.

By W. M. McLAURINE

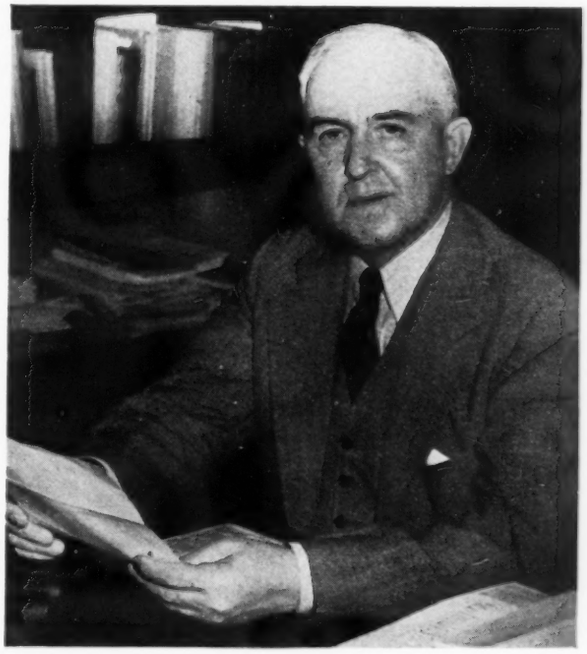
Sec.-Treas., American Cotton Manufacturers Association

THE YOUNGER the cotton-textile industry of a country is, the coarser the weaves and counts. The English cotton-textile industry is older than any section of this industry in the United States, and hence the finer weaves and fabrics are made there. Then came Ne England, and then the industry trekked through the South, through Virginia, the Carolinas, Georgia, on to the West, coarse yarns and heavy weaves being in the vanguard, followed by a tendency toward finer counts and finer constructions as the experience of the operators and operatives accumulated.

Going back to 1880, the cotton-textile industry began to grow vigorously, especially in the Carolinas and Georgia. The Carolinas were leading, due to the fact that power and transportation developments were growing more rapidly there than in other sections of the South. This area of North Carolina and South Carolina is in the Piedmont section, and was easily accessible in the early days to hydro-power and later to hydro-electric power. Within 10 or 15 years the spindleage of the South had increased to a little more than 4,000,000; most, if not all of these, were on heavy counts, while a large proportion of the mills were spinning mills only. This seemingly gigantic industry of uncorrelated units began to have troubles. The individuals began to hunt for remedies and found that the troubles were too big for them to solve as individuals, hence the idea of forming some kind of a central organization in which these common problems could be discussed and solved.

This idea culminated in the organization of the Southern Yarn Spinners Association in Charlotte, N. C., on May 15, 1897. It is interesting to note that in this first organization the names listed are all North Carolina men. That fact may be explained by the information that North Carolina took an early lead in textile manufacturing and has always maintained it. South Carolina came as a close second and was soon in the organization, followed by Georgia and other southern states. A study of the records of this first meeting reveals that some of the early problems have continued as problems throughout the years.

Problem of Transportation—One of the first problems presented was that of transportation rates. A new industry, new transportation systems, new marketing problems, a feeling of remoteness from consumers, a more experienced and, at that time, a more efficiently handled industry in New England, as well as old England, made transportation rates of great concern. Out of these discussions and investigations there developed in the state associations, and later for the American Cotton Manufacturers Association, highly trained traffic departments under the guidance of able manufacturers and operated by some of the most skillful traffic and rate experts the South has produced. These organizations are still in existence, and are some of the most constructive agencies in the industry.



MR. McLAURINE, at his desk in the Charlotte office of the American Cotton Manufacturers Association . . .

Social and Industrial Problems—Another problem that occupied the attention of this new association was that of social and industrial conditions. The mill village and the mill family bear a distinct and peculiar relationship to the southern mill. In New England there is, and always has been, compactness of social and industrial life due to the limited area and physiographical conditions. The average worker lives in the town, in the mass, and is accustomed to the town and the mass. In the South the people in that period lived in the country. The towns were small and, due to the disastrous conditions during and following the Civil War, there was

• *Officers of the American Cotton Manufacturers Association are: John H. Cheatham, Georgia-Kincaid Mills, Griffin, Ga., president; Kemp P. Lewis, Erwin Cotton Mills Co., Durham, N. C., first vice-president; Robert West, Riverside & Dan River Mills, Danville, Va., second vice-president; and Mr. McLaurine, secretary-treasurer. Executive offices are maintained at 1206 1st National Bank Bldg., Charlotte, N. C.*

much poverty and unemployment. The mills came largely as an answer to this need. They could not be located in towns. They had to take advantage of power and transportation and labor. Nowhere could all of these be found equally balanced. The people who worked in the mills were unable to buy and build homes, hence the mill operators had to make provisions for them. There was a constant migration from farm to factory and factory to farm.

As a result the Southern textile worker immediately became a distinct type in his relationship to his employer. Both parties sensed this situation early so, in 1897, we find that these manufacturers began at once to discuss the problems of industrial relations and how they could be improved by the leaders, and how those who were not fully conscious of the responsibilities and duties of these relationships could be impressed with them. In discussing these problems, hours of labor, ages of children employed, and general conditions which would establish relationships in keeping with social ideals and social practices were given serious thought. That these ideals have never died is established by the fact that in many southern mills and mill villages today are to be found material evidences of the most important and progressive ideals of advanced thinking in management anywhere in the world.

Production Vs. Demand—The problem of adjusting production to demand and of improving selling methods are two further activities that were discussed at this first meeting. It is significant that these two topics are receiving a great deal of attention at the present time, although 33 years have passed and the industry in the South has grown from 4,000,000 spindles to something more than 18,000,000 spindles.

As early as 1890, we find the Sherman Law staring industry in the face and daring it to do anything that would look like an agreement or a combine. This law was made necessary by the fact that some industries and business organizations, not textile, were considered to be gregarious to public disadvantage. In efforts to control production or to agree upon any uniform methods as to sales policy and conditions which made necessary the enactment of this law were so fresh in the minds of the people as practically to preclude any agreement, however fair it might have been. This policy of the government prevailed until recent years, during which time various trade associations, including the American Cotton Manufacturers Association, have convinced the government that there can be fair, honest, and legal combinations, as well as unfair, dishonest and illegal combinations.

The Birth of the Association—The foregoing subjects seem to have been the most perplexing problems of the industry in its early days, as well as now. The industry continue to grow and the value of co-operative effort grew with it, because none of the problems seemed to be capable of individual solution or final disposition. On May 15, 1903, the Southern Cotton Spinners Association decided to take on broader activities and broader relationships in the textile field, so a movement was made which finally resulted in a change of name to the American Cotton Manufacturers Association—the Southern Cotton Spinners Association bequeathing to the new organization its membership, experience and tradition. From that day to the present the American Cotton Manufacturers Association has been the recognized cotton-textile association of the South.

During the last five years the industry has been baffled with legislative threats and doubtful laws. This association has had large committees almost continuously in Washington due to these causes and the end is not yet in sight. It has been the spokesman for the industry, and has been the great laboratory to which its problems have been sent.

National Committee — Government in the United States has changed from purely legal administration into the economic government of the greatest business enterprises known in the world. This gradual change from political to economic administration has impressed it upon business in general, and upon the southern cotton-textile manufacturers in particular, that politicians and lawyers know very little about economic problems; and, since the business of government is dealing in a large measure with these questions, there was need for business men properly to inform government representatives of the economic conditions and the economic remedies required. Hence there was organized a legislative department in the American Cotton Manufacturers Association, assuming form, first, as a national legislative committee, and later combining with a similar committee from the National Association of Cotton Manufacturers into what was known as the National Council of American Cotton Manufacturers.

It was the duty of this committee and council to represent the industry before the national government. The value of their work can hardly be estimated when the field of business legislation is surveyed. In the matter of taxes, the tariff, transportation laws, inter- and intra-state commerce, the various rules pertaining to commerce, the interpretations of law as made by commissions and in numerous other fields this committee and council have been of great value to the industry.

The National Council has now been annulled and a legislative committee from this association cooperates with the Cotton-Textile Institute in most legislative functions. In problems affecting only the South, it functions independently.

Cotton Committee—As the industry grew and competition became more intense, as social life

(Continued on page 82.)

New England Mills Served by National Association of Cotton Manufacturers

By RUSSELL T. FISHER

President, National Association of Cotton Manufacturers

THE National Association of Cotton Manufacturers has been in continuous operation since 1854, when its predecessor, the Hampden County Spinners Association, was founded. The New England Cotton Manufacturers Association, immediate precursor of this Association, was incorporated on December 1, 1894, under the laws of Massachusetts. The purposes of the New England Cotton Manufacturers Association, as set forth in its charter were "encouraging scientific investigation and experiment as to the methods of manufacturing cotton; collecting and imparting information relating to the industry; and establishing and maintaining a library of works on textiles in the city of Boston . . ."

Under the heading of "encouraging scientific investigation and experiment" the activities of the Association have been wide and varied. An official of the Association for some years has held membership and participated in the activities of the American Society of Mechanical Engineers, The American Society for Testing Materials, The Textile Safety Council and other organizations interested in the scientific aspects of the textile industry. The Association through its membership on the National Council of Cotton Manufacturers during the World War period cooperated with the Federal government in the development and procurement of fabrics for use by the armed forces of the nation. In more recent years the Association has worked with the heads of the peacetime naval and military establishments in preparation of plans for possible wartime procurement of textiles. In practice, the Association always has interpreted "encouraging scientific investigation and experiment" in the broadest sense. In other words any promising venture into the field of scientific investigation affecting textiles has had and will continue to have the support of this Association.

Another activity of the Association which may be included in a broad interpretation of this first heading is sponsorship of an agreement which resulted in adoption of the New England Terms for Buying and Selling American Cotton. These terms during the 27 years of their existence have provided the basis for settling many thousands of disputes in an equitable manner. All questions on grade and staple are settled by an arbitration board maintained solely for this purpose. The saving in time and effort has been of inestimable value to all concerned. The arbitration principles embodied in these terms have for some years been used as standards in numerous college courses dealing with this subject.

In initiating the movement which resulted in the formation of the General Arbitration Council of the Textile Industry the Association helped bring into existence another body which has proved itself to be of definite practical value in the settlement of the numerous disputes that develop in the many branches of this large industry.

Disseminating Information

The all-inclusive aim of "collecting and imparting information relating to this industry" might perhaps be best described as the main function of any well conducted trade or industrial association. Particularly, while meeting the swift-moving events of recent years it has become more and more evident that the representatives of industry must be everlastingly on the alert in keeping before Association members timely accurate information affecting them. Not infrequently during the last five years have the efforts of this Association been devoted almost entirely to the task of interpreting and promulgating the various changes brought about by government in its relations with industry. Contact and co-operation with the various governmental

RUSSELL T. FISHER, at his office in Boston . . .

• *In addition to Mr. Fisher, the president, officers of the National Association of Cotton Manufacturers are: C. F. Broughton, Wamsutta Mills, New Bedford, Mass., and W. F. Staples, treasurer, Cabot Mfg. Company, Brunswick, Maine, vice-presidents. Offices of the association are at 80 Federal Street, Boston, Mass.*

agencies make up a not inconsiderable part of the duties performed by this Association.

Legislative Activities

Legislation, both national and state, holds the attention of this Association at all times when either the national congress or any of the state legislatures within the northeastern area are in session. It is the policy of the Association to keep informed about the progress of all legislation in any way affecting its membership. Pending bills, even though apparently doomed to fail of passage, are thoroughly explored in every detail. More than 25,000 legislative proposals were studied last year.

Collection and preparation of material for briefs and for oral presentation before state and national government bodies is a phase of legislative work to which much attention is given by this Association. Discussions, formal and informal, are constantly being held within the Association whenever legislation affecting the industry is under consideration.

As part of its legislative activities this Association has followed closely the movement for tax reform in the northeastern states. With a more friendly public attitude toward industry than was apparent some years back, the Association has found it worthwhile to co-operate with several of the legislative bodies that have studied the subject of taxation in recent years. The present equitable Massachusetts tax laws can be traced largely to the efforts put forth by this Association on behalf of industry.

Labor Problems

The policy of this Association does not provide for price maintenance work. The Association does not go into detailed study of labor problems affecting the individual mills represented within its membership. It may be said that in general the labor policy of the Association does not concern itself with matters within the plant. The individual manufacturer is best qualified to handle his own labor problems.

Insofar as labor problems affect the northeastern mills as a group, however, the Association has a positive interest in them. Here again, group discussions within the Association have been held for the purpose of clarifying the various aspects of general labor problems. Wage adjustments and other conditions of employment, however, are determined by the individual mill managements and not by the Association.

Meetings of Overseers

The Association has sponsored meetings of overseers at which their problems have been discussed by various authorities. In arranging these overseer meetings the Association has been conscious of the fact that to the rank and file of workers the overseer symbolizes management. Experience has shown that these group discussions demonstrated their value.

Education and training of young men for the industry is encouraged through the annual award of an honor medal for scholarship in each of the qualified textile schools. For many years the income of one of our special funds has been used to pay the tuition of deserving students.

The Association Medal

The Association awards a medal for outstanding accomplishment on behalf of the industry. This last medal is not awarded on a routine basis but only for actual outstanding accomplishment. The last award was made in 1935 to Ernest N. Hood, who was president of the Association during the trying period of the NRA.

The Freight Bureau

An ever-active division of this Association is the New England Cotton Freight Bureau, which is managed by Milan L. Hatch. This bureau is responsible for the tracing and locating of numerous cotton bales lost in transit. The heavy movement of cotton each year to New England brings with it mix-ups and wrong deliveries, with resultant "overs" and "shorts" due to poor markings, similarity of marks and effacing of marks in transit, the usual difficulties, principally via the water lines, that accompany the movement of cotton to New England.

Many short-loaded bales are also located at southern compresses and forwarded. In this latter work, the Bureau always has the best of co-operation at the southern shipping points.

Latest information on matters relating to freight rates is always available at the Bureau office. Liaison is maintained with railroads operating west of New England in identifying consignees of stray bales, as a further aid in the forwarding of cotton shipments to the proper destinations. The efficient operation of the Bureau has been made possible in no small degree by the active co-operation extended by both rail and water carriers.

During the 31 years of its existence the Bureau has rounded up hundreds of thousands of bales besides arranging numerous damage settlements.

The Association Library

As provided under terms of the charter of the New England Cotton Manufacturers Association, the present organization maintains a library on textiles in the city of Boston. Ever since this aim was included in the charter of the New England Cotton Manufacturers Association, books pertaining to textiles have been gathered and placed on the shelves of the Association library. Some of the volumes dating back far into the last century may be described as collector's specimens so rare and valuable have they become. Others, describing all divisions of the industry both in this country and abroad, trace all developments up to the present. In addition there is a vast store of information from official sources on the various governmental hearings in which the industry has been interested. Qualified critics have described this textile library as one of the most complete in the world.

Southern Textile Association Serves the Operating Executives of Southern Mills

By EDWIN M. HOLT

President, Southern Textile Association; Manager, Mill No. 3, Erwin Cotton Mills Company, Cooleemee, N. C. . . . .

IN JUNE of this year the Southern Textile Association will celebrate its 30th anniversary, having been organized in the Summer of 1908. Although the Association did not start with the present purpose in mind, by the time of the first meeting in August 1908 its purpose was fixed and confined to the education and development of the practical man in southern mills.

For a time the Association met as a whole every six months, and all the work that was done was done at these two meetings. The Association has been most fortunate in having at its command the ability and farsightedness of two men—namely, Marshall Dilling and Gordon Cobb, and it was because of the foresight of these men that there was developed in the Association the sectional meeting, which confined itself only to technical problems, the annual meeting being one of election of officers, recreation, and plans for the sectional meetings. Mr. Cobb in his work with the Association also conceived the idea of securing through questionnaires, pertinent questions for discussion, and opinions based on experiments and experience of superintendents and overseers.

With the advent of the NRA, Southern mills began operating on a shorter schedule, which gave overseers and superintendents freedom on Saturday, and permitted them to go a short distance, attend a four or five hour meeting, and still return home on the same day. This naturally called for a greater division of the Association, and from it grew the present divisional set-up. At present there are in the Association nine divisions, as follows:—Northern Master Mechanics, Southern Master Mechanics, Northern North Carolina-Virginia, Eastern Carolina, Piedmont, Western South Carolina, Gaston County, Eastern Tennessee, and Alabama-Louisiana-Mississippi (inactive). For each division there is a chairman, vice-chairman, and an executive board composed of from four to eight members.

How a Divisional Meeting Operates

Possibly the manner in which the Association works can best be understood by describing how the divisional meeting is held. A month to six weeks before the meeting date, the chairman calls his executive committee together, they discuss questions that are of particular interest to the group of mills in the division, and ask different overseers and superintendents residing in the area for further questions. When all questions are assembled, the executive committee again meets and selects the questions actually to be discussed. A copy of all questions is sent to the members of the division, and at times certain members are asked to be prepared to discuss certain questions on the program.

EDWIN M. HOLT

In the executive committee there are usually two leaders—one to lead the discussion on carding and spinning and the other to lead the discussion on weaving, spooling, warping, and slashing. Usually meetings are now held on Saturday morning from 9:30 until 1:00 o'clock, and at the appointed time, the chairman of the division opens the meeting either with a short talk, or has some interesting speaker for a short talk, after which the chairman turns the meeting over to the leader, and discussion of the questions contained on the program is begun.

It has never been an aim of the Association to ask information of its members that is not freely and voluntarily given. It has further been the determination of the Association not to deal with subjects that do not concern the technical operation of a plant, and discussion of wages, labor conditions, etc., has no part in the activities of the Association. The ambition of the Association is and has been to make the most expert superintendents and overseers in the textile industry. Its founders and its leaders have always believed that an overseer or superintendent interested enough in the work that he does to make experiments, to ask questions, or to analyze statements made by other practical mill men, must of necessity grow into a bigger, a better, and a more efficient overseer or superintendent.

While, as stated, the Association has never discussed wages and labor conditions, the relationship between capital and labor is probably the paramount question of this as well as any other industry to-day. Operating executives have no interest and are not concerned with the wages paid at one plant in compar-

(Continued on page 82)

Association of Cotton Textile Merchants—

Born of Emergency, Now an Essential Agency . . .

By W. RAY BELL

President, The Association of Cotton Textile Merchants of New York . . . . . .

• *William J. Gallon, of J. P. Stevens & Co., Inc., and John C. Hughes, Jr., of McCampbell & Co., Inc., are vice-presidents of The Association of Cotton Textile Merchants of New York, of which Mr. Bell is president. The executive committee includes the officers and George P. Ray, of Riverside & Dan River Cotton Mills; Charles A. Sweet, of Wellington Sears Company; and Frederic A. Williams, of Cannon Mills, Inc. Headquarters of the organization are at 40 Worth St., New York City.*

THIS SUMMER will mark the 20th birthday of The Association of Cotton Textile Merchants of New York. Born in the emergency of the World War, its activities during two decades have been consistently engaged in the service of its members, its industry and its country. Its specific contributions to the welfare of the industry and the public bear worthy testimony to the foresight of its founders who described the objectives of the Association in the following words:

"The objects of the Association shall be to promote in all lawful ways the commercial interests of and friendly business relations among its members; to acquire and disseminate information concerning trade conditions at home and abroad, credits and methods of manufacture and sale; to encourage fair and open competition; to deal with questions affecting the public safety and welfare, and in general to promote the interests of the Nation and of the trade and all its branches."

The ideal of a market organization which could express in word and action the collective intelligence of selling agencies and mill sales divisions was not realized until the increasing demands of the Government for war materials in the summer of 1918 made imperative the establishment of such a central body in which all sales representatives in the market could participate. There was a joint need for recognition by Government departments of the responsible character of these selling organizations and their specialized functions. Successful in these efforts to gain proper status, the new organization quickly showed its merit and capabilities in connection with the liquidation of Government contracts for war materials and the disposal of surplus textiles owned

Bachrach photo

W. RAY BELL

by the Government and the Red Cross at the expiration of the war.

Shortly afterwards, the precipitous decline in raw cotton prices from a 40-cent level to below 20 cents unloaded on the infant organization a serious trade emergency which threatened disastrous consequences to the entire industry. The efforts of its Committee on Unjust Claims and Cancellations were invaluable in the adjustment of this situation. Through it, the common endorsement by marketing agencies of the principle of contract sanctity was established under most trying conditions. To this Committee and the Special Advisory Committee on Government and Allied Interests belong a large measure of credit for the respect commanded by the organization in its fledgling days. On the part of its members and the industry generally these and other activities brought immediate recognition of the practical benefits and advantages from co-operative action in the market area.

Out of the many achievements of the early days, I have selected the foregoing for particular mention because they are typical of the Association's ability to perform most valiantly under severe stress. During recent years, this characteristic was amply demonstrated in the market adjustments to new and strange conditions imposed by the NRA and AAA legislation. Again guided by an able committee of prominent executives, known successively as the Industrial Recovery Committee and the Industry Committee, the cotton cloth markets passed through these crises with a minimum of disturbance. Contract clauses as recommended by this Committee were later implemented by the establishment of NRA differentials and processing tax differentials. Practically every executive in the market was included in the 52 groups whose concentrated efforts set a high mark for co-operative achievement. Through co-operation with the various buying organizations in the market, these recommendations served as authoritative rules for the guidance of both sellers and buyers in their transactions. The processing tax differentials several months later became the base for the Government's conversion factors in administering the Agricultural Adjustment Act.

(Continued on page 73.)

RESEARCH—a Need of the Industry, an Objective of AATCC

By ALBAN EAVENSON

President, American Association of Textile Chemists and Colorists; Chairman, Eavenson & Levering, Inc. . . .

HE WALKED around the corner 20 years ago—and never came back. Thus Herbert Corey in *Nation's Business* back in 1931 wrote of "the man in the blue serge suit".

"The American woolen industry has been waiting for him," Mr. Corey continued, "—just waiting. One is reminded of the old story of the one-legged man who dropped his shoe. The men in the bedrooms on either side stayed awake all night listening for the other shoe."

This graphic picture of one phase of wool men's troubles back in the days of the great depression should be illuminating now to men in other branches of textiles. In an era of lightning-quick changes, cotton and silk too have seen large segments of their markets going "around the corner". They too seem to some extent to have been "just waiting".

Fifty or sixty years ago our problems, speaking of textiles generally, were largely those of production. If goods could be made, they could be sold. Staple products were in large and steady demand—looms could run all season on one pattern.

Today, however, our problems center around distribution. Staple textiles no longer account for an overwhelming percentage of our production: people do not want them. Attribute this change in consumer acceptance to the fact that education has become more general (there are more students in our colleges today than there were in our high schools 60 years ago) or attribute it to the growth of advertising, or the development of means of quick communication between one part of the country and another, which enables novelties to sweep from coast to coast practically overnight—whatever the cause, it is a fact that the demand today is for something new and different. The younger generation is influenced tremendously by clever, persistent advertising. Youths eagerly accept merchandise forced into their consciousness by such means and turn their backs on the old favorites of their forbears.

There is no denying that textile interests have been slow to sense the situation and adapt their affairs to it. Happily, however, today we have associations in each of the four textile branches making aggressive efforts to influence

Phillips photo
ALBAN EAVENSON

and shape the attitude of the buying public. These are doing a mightily helpful job in educating consumers on the merits of the various textiles—building the greater appreciation which comes from better understanding.

Likewise the salespeople of retail stores are being educated, buyers are being made more style-conscious, a greater recognition is being built that American mills have the most intelligent and skillful help in the world, the most up-to-date machinery, the best of raw materials. In short, through the work of such associations as The Cotton-Textile Institute, the International Silk Guild, the Associated Wool Industies and various rayon organizations, consumers are now being made to realize that American textiles are among the finest and that there is absolutely nothing to the old belief that foreign goods are superior.

The work of the American Association of Textile Chemists and Colorists touches only indirectly upon the activities of the associations mentioned above. But our ultimate aim is the same—namely, to put American textiles into an impregnable position in the American market. Where the various trade associations are concerned with economic and distribution problems, we chemists and colorists are more directly interested in research which may be expected to have an effect upon the improvement of manufacturing processes in the textile industry as a whole.

Objectives of the American Association of Textile Chemists and Colorists are three-fold: (1) to increase knowledge of textile processes, (2) to encourage fundamental scientific research, (3) to facilitate and broaden exchange of knowledge relating to textiles. Attainment of these objectives is realized to be a very large order, particularly as we are concerned impartially with the cotton, wool, silk and rayon branches of the industry. It is obvious that in a short article only a bird's-eye view can be given of our activities. But right here I should like to point out that within the next few months a comprehensive survey, financed by the Textile Foundation, will be available. This study, made by economists at the University of Pennsylvania, will present a view of textiles as a whole, as relates to cost accounting and distribution methods.

Research, unfortunately, is regarded in some quarters as "trouble

• *Mr. Eavenson is president, and Duncan Ferguson and Arthur R. Thompson, Jr., are vice-presidents, of the American Association of Textile Chemists and Colorists. Louis A. Olney, of the Lowell Textile Institute, is president emeritus, and chairman of the research committee; and Harold C. Chapin, Lowell Textile Institute, Lowell, Mass., is secretary. Wm. R. Moorhouse, of Philadelphia, is treasurer. The organization operates through local sections: the Northern New England, the Rhode Island, the New York, the Philadelphia, the Midwest, the Piedmont, the Southeastern, and the South Central Sections—and student sections at Lowell, Philadelphia, and North Carolina textile schools.*

shooting". There is sometimes a tendency to put the cost down entirely on the debit side of the ledger, whereas it really belongs on the credit side, as one of the greatest assets and most profitable investments of many individual concerns and of whole industries. Another mistaken idea is that the cotton, wool and silk industries, being very old, have had ample time to solve their research problems. The truth is that ancient industries often have greater need for research than the newer ones.

For example, the rayon industry thoroughly appreciates the need for research if it would continue to go forward, or even maintain the high position in public regard which has been won. Of course the reason for this is that rayon was born in the laboratory and its executives are research-minded. Another modern industry which fully recognizes the importance of the research laboratory is the electrical. The magazine *Life* in a recent issue said of the General Electric Company: "G. E. has long realized that the price of progress is the cost of research. That is the reason it spends millions a year on laboratories, famed scientists . . . and several hundred unfamed but promising young engineers. For every dollar of profit earned through progress, the company estimates the public has been saved from $10.00 to $100.00." The motor industry, the steel industry and many others could be cited as among those who find research "the price of progress".

Perhaps it is not surprising that cotton and wool and silk are not more research-minded. These industries have grown by the trial-and-error method which, generally speaking, has apparently served them well up to the present. However, such methods are seldom productive of fundamental knowledge. The old industries are hedged about with customs and traditions so firmly grounded through years of usage that they can be changed only with great difficulty. Many of our executives not only look on research as an avoidable item of expense, but as an expense which is not apt to return much in dividends, if anything.

Textile manufacturers of England, Germany and Japan have awakened to a much greater extent than we to the need for research. The Shirley Institute and the Woolen and Worsted Research Association, both of England, are devoted respectively to cotton and wool research. These are large and splendid organizations which cannot be matched in this country. Both are supported on a 50-50 basis by the British Government and British manufacturers.

The American Association of Textile Chemists and Colorists is trying to do its full share in spreading the gospel of the need of research. It is imperative that somebody try to spread it for, under our "planned prosperity", the difference between textile production costs in this country and those abroad becomes steadily greater. Tariff protection has been reduced by reciprocity agreements: with the possible exception of Germany, every nation of any importance in the world is in on these reciprocity arrangements. And since Germany took over Austria, it may well be that she is also "in", for she may have taken over the reciprocity agreement with the government. Improvement in textile manufacture through intensive research is our best defense against these adverse conditions.

Some paragraphs back I spoke of the idea some executives have that research is "trouble shooting". The thought of the industry's scientists is to go deeper than this and to obtain basic and fundamental knowledge of the fibers, the reactions upon the fiber molecules of acids alkalies, reducing, oxidizing agents and all chemicals commonly used in textile manufacture.

In order to succeed, such a research plan as we have in mind must be centralized and organized for greatest effectiveness. It has been suggested that such funds of the American Association of Textile Chemists and Colorists as may be available, together with additional funds donated for the purpose, be expended on this fundamental research. Under this plan when sufficient data relating to any problem of dyeing, bleaching, finishing or what-not have been developed to form the basis for a practical mill study, which would have a reasonable prospect of producing successful results, then any additional work needed should be undertaken and financed by a group of mills directly interested.

It is not expected that textile manufacturers will immediately grasp the significance of and willingly support a plan of this broad scope. The research work which has already been done under the supervision of the United States Institute for Textile Research and the American Association of Textile Chemists and Colorists has produced fundamental data on which several mill studies can be based and which at a relatively small cost are reasonably certain of producing very worth while results. It will take some pioneer work to induce the mills to finance these studies.

Generally speaking, research can be "sold" to mills only with the greatest difficulty, until one can show them examples of research work which have proven splendid investments. Happily, however, there are some mills who within recent years have become more research-minded and are willing to put up their share of the costs. Far-seeing executives of these mills realize that the millions being expended by the chemical industries, the telephone and radio businesses and others, are not spent to gratify some whim or hobby, but are spent by hard-headed business men who realize that it is a splendid investment which may be reflected in tremendously increased earnings.

The idea must be sold to textile

manufacturers that the item "expense for research" is just as vital and necessary a part of overhead costs as insurance, interest, taxes, etc. It is felt that the membership of the American Association of Textile Chemists and Colorists is a splendid proving ground; it is made up of men with a scientific background, men of experience and influence in textile matters, and if the necessity for scientific research in textiles is not readily accepted by them, there is little chance of success indeed.

Manufacturers who see the need and who wish to place textiles in the forefront of vital modern industries can help immensely by becoming members of our association. The dues for active membership in the American Association of Textile Chemists and Colorists are but $5.00 a year. For this small amount members receive the excellent bi-weekly journal, *American Dyestuff Reporter*, and a copy of the annual year book. This book is a splendid publication. The list of dyes and chemicals, methods of testing materials, membership lists, reports on research projects and many other features are valuable and extremely useful.

Our annual meetings too, are outstanding. The writer, being a Philadelphian, points with pride to the last one held in the Quaker City. And we all remember the wonderful meeting of 1936 in Providence. One of the purposes of our association is to make easy the exchange of knowledge relating to textiles. There can be no better opportunity for this than that afforded by our well attended and very interesting meetings. The papers presented are excellent and the meetings are so conducted as to give every opportunity for "mixing". Friendships and contacts made at these meetings are not only of real and lasting value but most pleasurable.

We are all looking forward to our next annual meeting, during December, in Atlanta. And while we realize that it will be next to impossible for this meeting to surpass those that have gone before, we are convinced that southern cordiality and hospitality may turn the trick.

Cotton Textile Merchants Ass'n

(Continued from page 70.)

Our Industry Committee continues its leadership to this day. Upon the invalidation of these laws, NRA in 1935 and AAA in 1936, its recommendations enabled members and other marketing agencies to conclude contract adjustments with fairness and dispatch. In these developments we have appreciated more and more the value of close co-operation with other market and mill associations. From these relationships that have been carefully cultivated over many years have grown important and valuable market agencies of a co-operative nature. Among them are included such diverse mechanisms as the following:

(1) Textile Export Association of the United States. Prior to the formation of this Webb-Pomerene Act association, the Export Committee of the A.C.T.M. had been of special service to its members, particularly in the crisis that developed after the World War. Formation of this group largely with The Cotton-Textile Institute and the Textile Fabrics Association has transferred to specialists the conduct of this division of our markets.

(2) General Arbitration Council of the Textile Industry. Constituent trade associations have increased to the number of fourteen buying, selling and producing groups. Before its formation, this Association had its own Arbitration Committee and from the beginning has encouraged this method of settling controversies. The use of a compulsory arbitration provision in the Standard Cotton Textile Salesnote has effectively underwritten the practice.

(3) Standard Cotton Textile Salesnote. This provides for uniform conditions of sale and is in general use throughout the market with approval by a dozen or more organizations. It was originally promulgated in 1934 and revised in 1936.

(4) Worth Street Rules. Under the recommendation of 12 major trade organizations, this booklet was published in 1936. It includes the Standard Cotton Textile Salesnote, Arbitration Rules and Panel, Definitions and Trade Customs for the Entire Industry and Special Definitions and Trade Customs applying to the Converting Trade. The latter and in fact the entire conception of Worth Street rules grew out of conferences begun many years before with the converting trade and its trade organization. In addition, Worth Street Rules contain four endorsed specifications for various groups of fabrics. One of these, Specification "P", was originally developed with representatives of the coated fabrics manufacturers as early as 1931.

(5) Other specifications for individual fabrics and articles have been developed between representatives of this Association and the Federal Specifications Board for use in the purchase of Government requirements. These have not yet been compiled in a single trade document.

These accomplishments and others along similar lines represent the fruits of patient and intelligent effort over many years. To the credit of all participants, the approach in each undertaking has been that of mutual understanding and fairmindedness. Progress could not have been made otherwise. Lacking the spectacular quality of emergency activities, they represent permanent benefits to all elements in the market and in the industry. They are the culmination of movements which can be traced back to their initial stages of association effort and above all, they encourage a spirit of partnership between the various market elements in the business of supplying textile wants to the public.

The Association of Cotton Textile Merchants is justly proud of its part in the organization and maintenance of these institutions which have become incorporated in the ordinary practices of the market. They have functioned satisfactorily in the test of experience and provide a nucleus for further constructive action between groups which were formerly hostile. By promoting better understanding and greater tolerance between buyers and sellers, the value of such market alliances is without measure in their helpful influence on distribution.

The National Association of Wool Manufacturers...

By ARTHUR BESSE, President

FOR almost 75 years the National Association of Wool Manufacturers has served the wool textile industry. Following a meeting of manufacturers on October 5, 1864, in Springfield, Mass., to consider the advisability of forming an association, Articles of Association were adopted November 30, 1864. It was the first trade association in the country which was national in scope. The membership today includes mills reworking wool, scouring wool, combing tops, spinning yarns on the woolen or worsted systems, and weaving or knitting fabrics wholly or in part of woolen-spun or worsted-spun yarns; and it represents roughly three-fourths of the Industry.

Activity on Tariff Matters

From its inception the association has interested itself in matters relating to the tariff on wool and manufactures therefrom. Competition from abroad and lack of proper understanding between domestic growers and manufacturers were both factors which were instrumental in leading to the formation of the association. Since its organization the association has presented statements on the tariff requirements of the industry at times when revisions of the tariff law were under discussion and has helped in solving the technical problems encountered in constructing and administering the wool schedule. As early as 1872 the association advocated the establishment of a Customs Court, and in 1882 favored the formation of a Tariff Commission.

The association has always urged adequate protection for the American industry against disastrous foreign competition. Its representatives appeared before the Senate Committee on Finance in 1934 to oppose the reciprocal trade treaty program, and since the enactment of that program into law it has filed briefs with the Committee for Reciprocity Information in regard to the treaties with Belgium, France and the United Kingdom. In March 1938 representatives of the association appeared before this committee at hearings in connection with the proposed treaty with the United Kingdom. On May 11, 1936, a brief was presented to the Tariff Commission pointing out the rapid growth in imports from Japan and recommending assessment of duties on the American rather than the foreign valuation. Early in 1937 the Tariff Commission was asked to investigate the cost of manufacturing blankets in competing countries with a view of determining whether or not the existing rates were adequate. Imports of blankets and similar articles wholly or in chief value of wool have grown rapidly during the past two and a half years, and in 1937 exceeded the imports of any year under the last two tariff laws, amounting to over a million pounds.

At the present time the association, in co-operation with one of its members, has an appeal pending in a case before the Customs Court to determine whether or not certain automobile robes and steamer rugs shall be dutiable under the paragraph wherein they are named and under which the association maintains they should be assessed or under the "basket" clause bearing a much lower duty under which they are now entered.

Legislative Activities

In 1902 legislation was introduced in Congress providing for the labeling of wool fabrics with the proportion of new and reworked wool therein contained. This bill was considered impractical and was opposed by the association, which has likewise opposed all similar bills which have appeared from time to time since 1902. In November 1937 the United States Bureau of Standards promulgated Commercial Standard 65-38 dealing with the labeling of wool and part-wool fabrics, this standard having developed out of conferences called at the request of the association. Notwithstanding the existence of this standard the Federal Trade Commission is considering a set of rules for labeling which require a distinction between new and re-worked wool. The association is actively opposing these

ARTHUR BESSE, president of the National Association of Wool Manufacturers, shown testifying before a Congressional investigating committee in Washington . . . .

Acme photo

• *Associated with Mr. Besse in the wool association are the following officers: Vice-presidents, Franklin W. Hobbs, Thurmond Chatham, Lewis A. Hird, and Millard D. Brown; secretary-treasurer, Walter Humphreys. Offices of the association are maintained at 80 Federal Street, Boston, Mass., and 386 Fourth Avenue, New York City.*

rules as well as enactment of the Schwartz-Martin labeling bill carrying similar provisions.

Under the National Industrial Recovery Act enacted in 1933, the association drafted a code which was the third approved by the National Recovery Administration. The association was designated as the agency to administer many of the provisions of this code, and full expense of administering the code was assumed by the association. Although this code structure was invalidated by the Supreme Court in 1935, numerous of the activities initiated under the code were continued by the association.

In recent years numerous other proposed legislation which affected the industry, such as the 30-hour bill, the national textile bill, the wage-and-hour bills and other measures, have commanded the attention of the association.

In outlining the objects and plan of the association its first president, Mr. E. B. Bigelow, stated: ". . . and here let me remind you that a very important object of the association is the collection and diffusion of information on all those subjects in which we as manufacturers are particularly interested . . ." As one means of attaining this objective a quarterly journal was published from 1869 until 1932. Since that time a single annual bulletin has been issued in place of the former quarterly reports. A wealth of information covering a wide variety of subjects is embodied in these publications.

In order to gain timeliness for material appearing in the bulletin, preprints of some of it are forwarded to members in advance of actual publication. The annual bulletin is also supplemented by an issue of "Monthly Statistics of Wool Manufacture" which brings together current statistical information available from many sources. The association has worked with and given invaluable aid to numerous governmental agencies in improving the information pertaining to the industry which they collect. In addition the association itself engages directly in the regular collection and compilation of figures on sales, production, shipments, unfilled orders, and stocks of its leading products, and has undertaken such specific studies at times as a survey of hourly occupational earnings, and a study of available substitutes for olive oil used in the processing of wool fiber.

Numerous other activities have been engaged in from time to time. For instance in 1926 through co-operation with related industries and the Department of Agriculture, standards for grading wool and wool top were established. A committee of the association recently has investigated the desirability of revising the standard on wool top to conform more closely to current commercial practice, and several tentative methods of testing and grading for fineness have been submitted. A plan for the arbitration of trade disputes was prepared by the association executive committee in 1902. In co-operation with the American Arbitration Association special rules of arbitration for the wool and garment trades were compiled. Several years ago in co-operation with wool growers and wool dealers a survey was made of the possibilities in and need of sales promotion for wool products. As a result of this survey Associated Wool Industries, a co-operative organization supported by wool growers, wool dealers and wool textile mills, was formed to carry on such work.

The need and opportunity for the industry to work through a national association has grown with the development of the country and with the increasing complexity of the economic and social structure. In recent years the activities of the federal government have grown to affect business more and more, and effective co-operation with or opposition to policies of the government is impossible except through some organized body. This effort requires constant vigilance as to developments and the collection, classification, and interpretation of a vast body of figures and other information. The individual manufacturer has also found the determination of his position in the industry increasingly difficult and the determination of his own policies more and more dependent upon what the "other" fellow does. These problems can best be solved through co-operative action and the interchange of data and opinions, such as is possible only through a strong national association.

Cotton-Textile Institute

(Continued from page 64.)

promotion work. Without their aid the cotton road experimentation on such a large scale would have been impossible, and we still look hopefully to them as our best allies in the campaign for cotton wrapping of cotton bales, as well as other projects of great promise. The Department of Commerce, always helpful, will be in a position shortly to be still more co-operative when the special funds allotted to them in the recent agricultural act become available.

There is also the Tariff Commission which sees us quite frequently when foreign trade matters come up. Foreign problems likewise bring us into close and frequent touch with the State Department. The unofficial and informal support of these two arms of government made possible our private agreements with the Japanese and upon them we shall no doubt have to lean again when the times of renewal come. The impending rearrangement of trade relationships with the Philippines have been and for some time will continue to be the occasion of conferences with State Department officials and members of the Joint Preparatory Commission of the U. S. and the Islands.

These are but scattered and random examples of the great range and variety of Institute activities. There is plent of grist for the mill. May there always be enough water in the race to keep it turning!

Lisle Hosiery Is Current Drive of Durene Ass'n. . .

By DEAN HILL

President, Durene Association of America, and Mercerizers' Association of America . . .

AT THE present time and for the past 12 months the main activity of the Durene Association of America has been that of determining ways and means of increasing the consumption of mercerized cotton yarn. The members of the Association have felt for some time that no greater service could be rendered the nation during these distressing days than to find ways and means of increasing the consumption of American grown cotton. In so doing the members of the Association know that not only they themselves will benefit by this activity but that the cotton farmer, shipper and spinner would benefit.

The members of the Durene Association of America welcome this opportunity offered by COTTON to present to the textile industry, and especially that part of the textile industry devoted to cotton, some idea of their efforts to popularize and increase the use of mercerized cotton yarn. In passing it might be well to mention that the Durene Association of America and the Mercerizers Association of America are closely allied and work hand in hand.

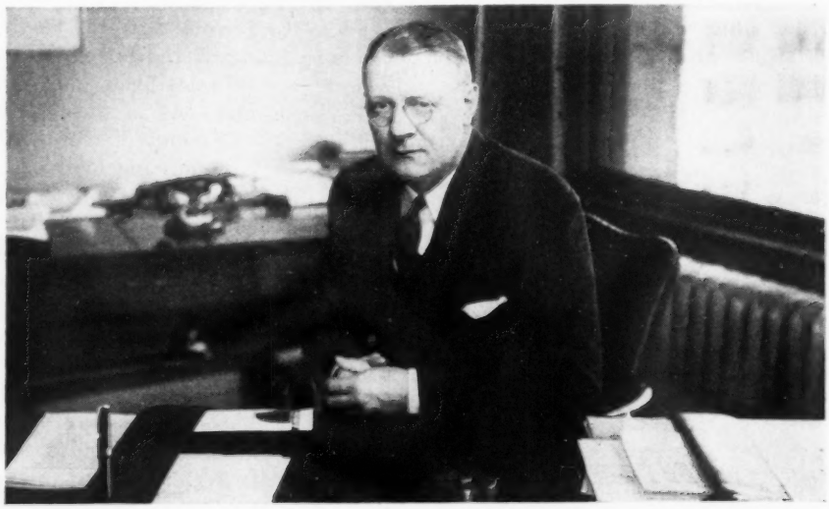
The mercerizing industry has suffered heavily in the loss of production since its peak years in 1928 and 1929. Not only has the industry suffered severely in the loss of domestic business, but it experienced even heavier losses in export sales. A conservative estimate places the shrinkage in volume of the combined domestic and export business at 50 per cent since the peak years of 1928 and 1929.

In our attempts to analyze the reasons for the loss in volume of business we went back into the early days of the mercerizing industry and there we found the old mercerized cotton stocking which was then the accepted leg covering for women and children. We knew of course that the silk stocking had replaced the cotton stocking in increasing quantities each year until the cotton stocking had become almost a thing of the past. We asked ourselves whether there was some way in which the cotton stocking could be brought back at least in part. All we could see were beautiful gleaming ankles clad in silk, but every now and then we saw silken ankles that did not look so good to us. It took us some time to figure out just why in some instances those lovely silken sheer stockings did not have the correct appearance. We finally saw that it was because they clashed with the costume being worn. In other words, the sheer silken hosiery was being inappropriately worn when the woman was attired in tweeds or sports clothes, particularly so if sport shoes were being worn. We asked ourselves: wouldn't cotton stockings look more attractive with such attire than the sheer silks. But we just could not picture the well dressed woman wearing the cotton stockings that we knew about. Well, to make a long story short, we made up our minds to take a shot at styling cotton hosiery that would result in an appropriate stocking that would appeal to women for wear with tweeds and sport clothes.

We immediately saw that our first endeavor must be to overcome the "cottony" appearance inherent in the ordinary cotton stocking. We determined upon mesh effects, both vertical, horizontal and all over mesh as the best means of breaking up the "short wave" or "cottony" appearance. And we also said we must stay as far away as possible from a silk stocking.

After months of knitting and experimenting we brought out a number of attractive styles of full-fashioned patterned cotton stockings which appealed so strongly to certain stores that they immediately placed orders with their knitters and we were under way. How far we will go depends in a great measure on the amount of money we spend on promotion. We have found out one thing—patterned cotton stockings are wanted by the

(Continued on page 79)



Apeda photo

● *Headquarters of the Durene Association of America and the Mercerizers Association of America, of which Mr. Hill, shown here at his desk, is president, are at 468 Fourth Avenue, New York City.*

The History and Activities of the National Federation of Textiles, Inc.

By G. H. CONZE, President

THE NEED of co-operative action was early recognized by the manufacturers of silk fabrics who, on June 26, 1872, met at the old Astor House in New York City to form the Silk Association of America, Inc., now The National Federation of Textiles, Inc. The 66 years intervening cover a continuous program of activities that covers almost every bit of association work.

At the present time, its most noteworthy services to the silk and rayon piece goods industry are those of design protection and the arbitration of disputes involving the purchase and sale of raw material and finished products. In addition, the organization offers a trade mark bureau service as a clearing house to prevent duplication of trade marks in the entire textile and clothing fields; a statistical bureau that affords a factual record of the industry's operations since 1872; a technical research bureau for the development of standards in the manufacture of merchandise and in the grading of yarn; a traffic bureau and insurance department; and a library that is used extensively not only by the industry but by government representatives, advertising agencies and other groups engaged in the study of the industry's conditions.

Since its beginning, the association has had as divisions of its members, manufacturers of spun silks; manufacturers of yarns; sewing silks; ribbons; hosiery; glove silks; laces; nets and veilings; velvets, as well as fabrics of all kinds. For the past few years, however, and especially since the NRA, the association members comprise mainly manufacturers of what are known as broad goods in both silk and rayon. In 1934 the name of the Silk Association of America, Inc., was changed to that of The National Federation of Textiles, Inc., so as to describe more properly the interests of its members.

The passing of the years has brought a change in some of the specific problems being handled by the Federation, although fundamentally the departments of activity are the same. The need of the industry for raw material of sufficient quality and quantity to meet the post war demand for silk necessitated use of the association as a medium of standardization for silk grading. Despite the handicap of international trade with a source of supply that was far removed from the home market, a grading system was developed and adopted. Today, standardization work of this type is being directed towards development of standards for supplying *fabrics* that will meet grading as to wearing quality. Statistics that were formerly applied more to information as to imports of raw silk and imports of manufactured goods are now directed towards productions, stocks and sales of piece goods and compilation of hours of work and wages paid. Arbitration cases that originally covered disputes on raw material, now are concerned in the main with the sales of fabric, whether unfinished or finished. Where once the codification of trade practices incorporated into standard contracts was more important in the yarn division, today it is the contract for the sale of fabrics that engages the attention of committees and members.

Bachrach photo

G. H. CONZE

The regulation of designs for print fabrics, as well as for jacquards, laces and embroideries, comprises the most extensive present activity of the organization employing, at the present time, a staff of 40. This division in itself is considered an outstanding achievement of co-operative activity in American industry. In 1937, it was awarded honorable mention by a committee headed by the Secretary of Commerce, Daniel E. Roper, as an example of voluntary solution of an industry's problem. It has served as a model for design protection in other fields and in fact, performed the service of design protection not only for the textile industry but for leather tanners and toy manufacturers.

Various bureaus of the organization as outlined working with the members of the Federation and its board of directors represent a constructive and live picture of what can be done in meeting trade and industry problems through education and a long range program of co-operative work. The experiences of the staff among the several different divisions provide a medium of carrying out the plans and proposals of the industry itself. That has been the function of the association for over half a century.

Young, but Effective—the National Rayon Weavers' Association

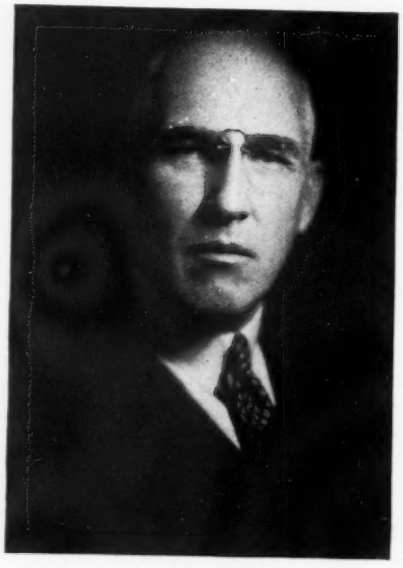
By CHARLES WHITNEY DALL, President

IN MAY of this year the National Rayon Weavers Association will celebrate its 5th birthday. Its formation was the outgrowth of a meeting of a group of rayon weavers in Washington, under the leadership of J. Spencer Love, Hon. O. Max Gardner, former governor of North Carolina, and A. G. Meyers. The thought had often been expressed by those manufacturers who had pioneered in the weaving of rayon fabrics that an organization of weavers of the new fabric should be formed, but no action toward this end had been taken. With the enactment of the National Recovery Act assured, the rayon weaving mills were confronted with the problem of establishing officially the identity of their industry, and forming an organization which could act for the industry, not only for the purpose of the Act, but for the future. The National Rayon Weavers Association is the result of this meeting, which was characterized by a spirit of co-operation and singleness of purpose which have been lasting. During the last year, this group consumed approximately 80 per cent of the yarn used in broad woven goods.

Legislative Activities

Its primary function has been that of a clearing house for information for its members, not only acting as an interpretative and administrative agency during the days of the formation of the Code, its functioning and its abandonment, but also in the field of operations, labor relations, distribution, and as an effective instrument in promoting close and harmonious relations between its members.

The second most important function of the Association has been that of acting for its membership in legislative matters. Past experience in other fields had proved that effective Association work is best accomplished by relatively small groups of officers and committees, working steadily and consistently to fulfill the expressed desires of the membership, in a cause common to all. Widely spread, geographically, it is not convenient for the membership to meet often. Consequently, few general meetings are held during the course of the year, but there are frequent meetings of the executive committee, and other committees, representing different



Blank & Stoller photo
CHARLES WHITNEY DALL

fabric groups, and dealing with specific problems.

In legislative matters it is the policy of the Association to assemble and analyze the facts, offer interpretations, and recommendations to the membership for them to approve, change or reject. It consults with its membership, through personal contact, and the discussions conducted with small groups, so that it secures the crystallized opinion of the industry, on which the executive committee formulates its policies, which are put into effect by the officers. In this way, the voice of the rayon weaving industry is heard in meeting with Governmental agencies and other industries, as the occasion demands.

Probably the most important work, in the legislative field, was the action taken by the Association in the matter of the proposed compensating tax on rayon, where it was conclusively proved that, based on the facts and the law, such a tax was not justified. It is estimated that as a result of this presentation, there was a saving to the industry of between $15,000,000 and $20,000,000, and an infinite amount of inconvenience.

Statistical Services

Until this Association was formed, virtually no statistics with respect to rayon woven cloth had been gathered. Under the provisions of the Code, reports of members as to production, shipments, stock and unfilled orders were regularly compiled. After the termination of the Code, this Association, in co-operation with the National Federation of Textiles, compiles and publishes a monthly index of deliveries of rayon woven cloth to the distributing trade, the imports and exports of fabrics and raw materials, and other pertinent data, the sample covering approximately 95 per cent of the industry. Special statistical data is gathered and furnished to members whose interests lie in more or less specialized fields. Recently there has been released, weekly, survey of loom activity, calculated to replace rumor and fear by the statement of known facts. It has been said that facts are the least developed of any of our natural resources. It is the aim of the Association to continue to develop facts, so that eventually there may be provided a clear picture of the

• *R. E. Henry, Dunean Mills, Greenville, S. C., is chairman of the board of the National Rayon Weavers Association, Inc., of which Mr. Dall is president, secretary and treasurer. Paul Whitin, of North Uxbridge, Mass., and George M. Wright, Republic Cotton Mills, Great Falls, S. C., are vice-presidents. Headquarters are at 40 Worth Street, New York City.*

flow of goods, beginning with the raw materials, and ending with the retail distribution to the consumer. This ideal is far from being realized at present, but, when developed, will constitute a most valuable guide to manufacturers and distributors.

Fabric Promotion Work

In the realm of fabric promotion, careful thought has been given to the value of a co-operative advertising and educational campaign. Upon close examination, this proves to be a very complex matter in this industry, inasmuch as rayon woven cloth passes through many hands before it reaches the ultimate consumer. The manufacturers of rayon yarn, years ago, were quick to realize that the interest of a manufacturer in his product does not cease when title to the merchandise changes hands. Consequently, they have, individually, done splendid work in informing the public as to the value, versatility and beauty of rayon woven fabrics, in advertising their own yarn. It, therefore, appeared that while there were distinct merits in an industry-wide promotion plan, it, in part, duplicated and overlapped the work of the yarn producer. Nevertheless, in cooperation with some of the prominent yarn producers, this Association sponsored a sound-slide film—"Rayon Comes of Age"—which has had wide acceptance as an educational film, not only before the sales personnel of department stores, but in high schools, home economics clubs and vocational training institutes. It is clear that this field can be enlarged in the future most profitably.

Relations with Other Associations

At the outset, the directors recognized that the needs of one industry are tied closely to those of others, and that the policy of one, particularly in the case of the various textile industries, should have regard for the whole complex economy. As a result, most satisfactory and close relations with other associations in the textile field have been cultivated and established. This is particularly true in the pleasant association with The Cotton-Textile Institute, and the National Federation of Textiles. The Association has assisted financially in matters of technical interest, such as the rayon crepe study, sponsored by the Throwsters Research Institute, a highly technical matter, the results of which are now at the disposal of the industry. Its broad policy is to integrate its activity with other trade associations, where principles involved constitute a common objective, which, individually, might be difficult of achievement.

Not the least important of the Association's activities have been the meetings of groups of members which have been held at frequent intervals, for discussion of common problems, and the exchange of information. Gone is the day when an association is expected to fix prices and destroy all competition with which its membership is faced. Given the facts and the approach made by different members to problems of mutual interest, manufacturers are quite able to chart a course as safe as the waves of political, social and economic hallucinations, which now flood the United States, will permit.

The Durene Association of America

(Continued from page 76)

American women to wear with tweeds and sports clothes. We have given away this patterned type cotton hosiery to several thousand women and over 80 per cent of them have told us that there is a place in their wardrobe for this hosiery. Today more than 150 stores from coast to coast have actively promoted patterned type cotton hosiery by advertising and most of them tell us that the results have been satisfactory and that they intend to continue with the promotion and advertising.

The retail stores are slowly recognizing that the sale of cotton hosiery need not have an adverse effect upon their hosiery sales despite the longer wear of the cotton stocking. The wide-awake stores are pointing out to their customers that the savings made in the appropriate wear of cotton hosiery can be invested in better and sheerer silk hosiery to be worn more frequently than in the past.

Planned Before Boycott Talk

If the American women will accept the attractive patterned cotton stockings for appropriate wear with tweeds and sports clothes the effect will be far reaching on the cotton industry. Women have shoe wardrobes, hat wardrobes, different types of hand bags—so why should they not have a hosiery wardrobe? If every woman who buys full-fashioned silk hosiery would buy three pairs a year of full-fashioned patterned cotton hosiery it would mean the use of about 40,000 additional bales of cotton, put the southern fine yarn spinning mills running to capacity and increase the volume of mercerizing business 50 per cent.

We are of the opinion that there is nothing the average woman can wear that would make her more conscious of cotton than cotton hosiery. When wearing this new styled hosiery with her tweeds and sports clothes she would be aware of the great contrast between that and her sheer silk hosiery and realizing the attractiveness of the cotton hosiery would come to a full appreciation of the possibilities of cotton.

We would like to point out that we started our experimental work on cotton hosiery in March of 1937, six months before there was any talk of boycotting silk hosiery and long before Japan invaded China. There should be an appeal in this cotton hosiery to all cotton interests and there need be no talk of boycott of silk hosiery for the hosiery stands on its own merits and there is a proven place for it in the average woman's wardrobe.

The U. S. Institute for Textile Research, Inc.

By CHARLES H. CLARK, Secretary

WHILE United States Institute for Textile Research, Inc., is the only association in this country devoted solely to the promotion of textile research, there are other organizations, educational institutions and government departments which have textile research as one of their activities, and one other body, the Textile Foundation, which is devoted solely to research for the textile industries. A brief outline of the research methods and organization of these agencies may aid the reader in understanding the present status of textile research in this country, and of its potentialities under its present or possible future set-up.

The Textile Foundation was authorized by Act of Congress in 1930 to take over for textile research and administer, by a board of five directors, a fund of about $1,200,000, that was fortuitously accumulated by the old Textile Alliance in the distribution of German reparations dyestuffs.

U. S. Institute for Textile Research was organized and incorporated in the same year to provide a body for mill executives and others interested in textile research that would engage co-operatively in research promotion, in the correlation of research activities, and act as a clearing-house of textile research information. It was organized by delegates of 24 leading textile associations at the call of representatives of the Textile Research Council and the American Association of Textile Chemists and Colorists. The Council gave it its constitution and by-laws, and its membership, and then disbanded. The A. A. T. C. C., whose membership is clearly defined by its title, continued its research committee, its textile chemical researches, and its other activities. Many of its members, while retaining their A. A. T. C. C. memberships, joined U. S. Institute and have been important factors in its work as directors, officers and committee members. For the publication of its research reports the A. A. T. C. C. continued the use of its official organ, the *American Dyestuff Reporter*, instead of using *Textile Research*, the official publication of U. S. Institute and the Textile Foundation, for this purpose.

Devoted to Fundamental Research

The type of scientific and economic textile research that is conducted by agencies referred to in this article is fundamental, as distinguished from the industrial type; this explains the lack of reference here to organizations that conduct industrial and similar research. Much of the work in developing textile testing methods conducted by Committee D-13 (textile) of the American Society for Testing Materials, however, is basic and a valuable addition to the textile research program. The membership of this body is to a considerable extent duplicated in that of U. S. Institute and the A. A. T. C. C.

Few of the educational institutions, other than the Textile Engineering Department of Massachusetts Institute of Technology, conduct basic textile research with their own funds, but the list of those that have conducted such research that has been financed by the Textile Foundation, U. S. Institute and the A. A. T. C. C. would include several of the textile schools as well as many universities and engineering schools.

Although the cotton and wool marketing divisions of the Bureau of Agricultural Economics of the Department of Agriculture, and the Bureau of Home Economics of that department, are constantly making valuable contributions to new basic textile knowledge this is dependent upon government appropriations and practically independent of the work of other textile research bodies. There is, however, a free interchange of information between them. The government department that is most closely associated with the industry's program of textile research, and whose facilities are available to groups of manufacturers upon a basis similar to that of U. S. Institute and the A. A. T. C. C. is the National Bureau of Standards. It has conducted research of a more or less basic character on its Research Associate plan for several of the associations of textile manufacturers, and at present has a fundamental study of the chemistry of wool in progress for the A. A. T. C. C. and another on textile drying for U. S. Institute. Its routine work in connection with the establishment of standards for government purchases frequently involves basic textile research and is, of course, financed by the government.

It has been noted that U. S. Institute for Textile Research differs from all other associations in that it is devoted solely to the promotion of textile research. It differs also in the fact that it is the only association engaged in textile research which as a basic policy undertakes to secure the co-operation of the industry in the financing of its researches wholly or in part. It presupposes an industry needing basic scientific research, but composed of a large number of relatively small units, few of which have research facilities, and few of the latter with the personnel or available time for the solution of problems involving the development of new principles that are basic to a large cross-section of the industry.

Phases of Institute's Activities

The co-operation made available by this system is both varied and valuable:

(1) That of the Institute through its Research Council in selecting the research subject; (2) That of an open conference of the cross-section of the industry to which the research subject is basic, which open conference decides whether its study is needed and should be organized by the Institute:

• *E. H. Kilheffer is chairman of the executive committee of the U. S. Institute for Textile Research, Inc., with Ernest N. Hood as treasurer, W. E. Emley as chairman of the research council, and Mr. Clark as secretary. Headquarters are at 65 Franklin St., Boston, Mass.*

(3) that of an organization committee of specialists on this subject; (4) that of the Institute in arranging for the financing, which may be wholly by co-operating firms, or partially by foundations; (5) that of co-operating firms in contributing experience, advice, materials, etc.; (6) that of an administration committee, selected because of scientific or practical knowledge of the subject, whose services, and often their expenses, are contributed; (7) that of institutional or other laboratories, whose facilities and the consulting services of their personnel are donated to a co-operative group of this character which pays only salaries of its own research workers.

U. S. Institute's research on warp sizing and sizing materials, which was organized in 1935 and has been in progress since then at Massachusetts Institute of Technology and certain co-operating mills, was financed on a 50-50 basis for $5,000 a year by the Textile Foundation and U. S. Institute, the latter securing 25 co-operators at $100 a year each, and giving them "contributing memberships" ($100 a year) at no extra cost. Financing provided for this project from its start in 1935 to Oct. 1, 1938, aggregates $20,000. U. S. Institute's study of textile drying organized in 1937 and in progress at the National Bureau of Standards was wholly financed at $5,000 a year by 50 contributing members. Progress reports of these co-operatively financed researches are made periodically to co-operators, and are not available for publication to annual members (dues $10 a year) until a year later. Present contributing membership is a little over 100, and Annual Membership approximately 200.

Another type of co-operative research organized by U. S. Institute is the "Survey of Production and Distribution Organization in the Textile Industries," which has been completed by the Wharton School of Finance and Commerce, University of Pennsylvania, and is nearly ready for publication. This research was initiated and planned by U. S. Institute's Committee on Economic Research, received the endorsements of the heads of 14 leading textile associations, was recommended to the Textile Foundation for financial support, and was wholly financed by the latter at $20,000. The survey has been personally directed by Dean Willits of the Wharton School and three associates, and more than 500 manufacturers and merchants have been interviewed in this connection.

In the supervision of the research the Committee on Economic Research has had the co-operation of an Advisory Committee consisting of President Murchison of the Cotton-Textile Institute; President Besse of the National Association of Wool Manufacturers, and President Bell of the Association of Cotton Textile Merchants of New York.

U. S. Institute for Textile Research, like the Textile Foundation, has no laboratories of its own, but utilizes existing institutional and governmental facilities for its researches instead of duplicating the latter and tying up large sums of money in buildings and equipment as do the British textile research associations. The sums spent annually by these British research associations are much greater than those expended each year for research by the Textile Foundation, U. S. Institute and other textile organizations; but there is this important difference: every penny of the money spent by the latter is for the actual expenses of research work, while a large part of the British expenditures is for buildings and equipment or their upkeep, depreciation, etc., and for administrative salaries.

Look at the British

The British Cotton Industry Research Association, which body also conducts research for the rayon and silk industries, has an investment in plant and equipment of more than a million dollars. The last annual report of this association budgeted operating expenses for the current year of about $450,000. The major part of its operating income is contributed upon approximately a 50-50 basis by the government's Division of Scientific and Industrial Research and co-operating manufacturers. The latter are the main sources of income of the other British textile research associations, and the total annual expenditures of all of the British associations for textile research must be around $500,000. A most liberal estimate of the annual expenditure for textile research in this country by the Textile Foundation, and by the research associations, including moneys received by the latter from the industry and other sources, is less than $100,000.

Pending the time when the Administration and Congress are as solicitous about the research needs of domestic industry, as they are about the lowering of our tariff walls to allow increased imports of products of foreign industries, it will be necessary for the textile industry to do its own research financing. The irreducible minimum of such financing that could be expected to produce reasonable results would be a sum at least double the estimated present annual expenditure of $100,000. Grants of the Textile Foundation should be matched on a 50-50 basis by contributions of the industry through U. S. Institute or the A. A. T. C. C.

Please understand, however, that the suggested basis for the financing of textile research is "the irreducible minimum". For a basis more adequate to the needs and size of the domestic textile industry the directors of U. S. Institute have plans in preparation. The annual cost when spread *pro rata* over a major part of the industry would be an insignificant fraction of the cost per bale of its raw materials, or per $1,000 of its pay roll. Eventually, if not soon, the domestic textile industry must show whether or not it wants to lead the representative textile countries of the world in basic textile research, which means the development of new textile knowledge, or whether it is going to be satisfied to get its new synthetic fibres, its new processes and products at second hand from Japan, Italy, Germany and Great Britain.

(Other articles in this special treatment of textile trade associations, covering four of the major associations in the knitting field, will be found in the Knitting Section, beginning on page 141 in this issue.—The Editor.)

• *Mr. Holt, president of the Southern Textile Association, is manager of Mill No. 3, Erwin Cotton Mills Co., Cooleemee, N. C. L. J. Rushworth, superintendent, Riverside Division, Riverside & Dan River Cotton Mills, Danville, Va., is vice-president; and Joseph C. Cobb is chairman of the board of governors. B. Ellis Royal, of Charlotte, N. C., is secretary-treasurer.*

Southern Textile Association

(Continued from page 69.)

ison to another, nor are they concerned with general relationships existing between a company and its employees, yet the attitude of the worker is created by the relationship established between him and his overseer, and everyone recognizes that one overseer with the wrong handling of departmental problems relating to labor can ruin an amiable relationship between a company and its workers. For this reason, many leaders in the Association believe that a round table discussion of problems relating to the overseer and the worker not only would be most beneficial toward helping the overseer run his department more efficiently, but also would go a long way toward obviating misunderstandings between the workers generally and the company. With the desire on the part of the Association to make operating executives more efficient, apparently the Association will have to concern itself with this problem.

The Arkwrights, Inc.

The Association has been interested in carrying research problems to their conclusion, and in establishing standards based on research that are correct, workable generally, and useful as a reliable guide trroughout the industry. With this in mind, we established some years ago The Arkwrights, Inc., as a subsidiary research body.

Membership in the Arkwrights can be secured only by making tests and pursuing a problem to its ultimate conclusion, following which these tests and results are written and presented to the research committee. If the committee feels that the applicant has made sufficient tests and study to make his findings reliable, he then becomes a member of the Arkwrights. The Association believes that the Arkwright tests have a possibility of becoming standards of measurement and procedure. Any eligible member of the Association can become an Arkwright by securing from the organization an assignment or question, the answer to which can be found by experimentation.

The Association has much to be proud of and much to justify its existence, but in its work it has scarcely scratched the surface. The Association offers to every eligible member an opportunity for improving himself, and in this improvement to make more efficient the operation of the plant with which he is connected. The owners and presidents of mills in this territory recognize and appreciate its good work, and they are to be thanked for giving of time and money toward furthering the work of this Association.

This article would not be complete without saying that a large part of the success of the Association is also due to the interest and help of its associate members—those people who represent the manufacturers of machines and equipment used in southern mills. It was through them that the Association was able to bring to the South the Southern Textile Exposition which is held in Greenville, S. C., every two years. No mill man can attend the Greenville exhibition and see the latest devices for manufacturing yarns and cloth without realizing that he is part of a great industry, and that along with him there are men who are giving of their time, their minds, and their money towards building a bigger and better industry. The Association intends to be a part of the industry of the future, and guards very jealously its opportunity to help train men who really deal directly with machines and workers.

American Cotton Mfrs. Ass'n

(Continued from page 66.)

reached new levels, better fabrics were demanded, and this demand brought about some new problems for the mill owners, among them the proper selection of staple and grade of cotton to be used in the manufacture of these products. This was accentuated by the advent of the boll weevil and its rapid spread throughout the South, causing the fine staple and grade of cotton that formerly had been generally grown to be changed into hundreds of breeds of mixed varieties. In an attempt to improve conditions and to solve these problems, there was organized in the association a Cotton Committee to confer with a similar committee of the Cotton Shippers Association and work out rules and regulations for the buying and selling of raw cotton; to establish and work out rules for the arbitration of cotton over which there was a dispute; to formulate and supervise an arbitration board and to set up an appeal board, which would act as a final court in determining whether a contract to buy or sell cotton had been properly and fully executed.

The work of this committee is very important at the present time, and is most likely to be in the future, as competition has not lessened, and grade, staple, and character do not seem to improve materially, while the general demand of the public for better quality products has constantly increased. The general rules and regulations, as formulated by this committee, have recently undergone revision.

Technical Subjects—The Association at one time in its development discussed technical questions bearing upon the manufacturing end, such as machinery improvements, humidity, the influence of dust and how this could be corrected, waste, sanitation and other manufacturing problems, but these now, in large measure, have been turned over to organizations composed of superintendents and overseers.

Cotton Ginning—Another subject that the association has considered is the question of the ginning, wrapping, and tare of raw cotton. Ginning has required particular attention because, as indicated in a preceding paragraph, the regular staples of cotton have been much mixed owing to the influence of the boll weevil. Speed and poor ginning methods have had a tendency further to deteriorate the staple. I believe that it is safe to say that almost as much

attention is being given at present to the proper way of ginning cotton as to any other phase touching the raw product. Another factor that has entered into the ginning of cotton has been the unusual increase of acreage in the West and the scarcity of labor for harvesting the crop. This has resulted in sledding and snapping cotton, which have reacted unfavorably on the ginning process.

Cotton Warehousing—The question of cotton warehousing and cotton co-operative associations has also been studied by the mills with a view to working our co-operative relationships of benefit to the farmer as well as to the mills. The association has also been influential in establishing crop and census reports, in the setting up of cotton standards, and in various ways connected with the government's efforts to assist business. It has also co-operated with the various cotton exchanges in the establishment of operating rules and standard contracts, and was successful in securing the adoption of points for southern delivery.

Co-Operative Activities — The work so effectively and harmoniously carried on through various committees and by the officers and board of government is in the closest possible correlation with the special functions of the executive offices, chief among which are what may be termed co-operative activities. Often in carrying on the work of state and local associations the necessity arises of having a parent body in which all common and related activities may be concentrated and unified. It is felt that the association amply fulfills this requirement, and, in keeping with past policy, a close relationship is maintained with state and local associations, giving increased opportunities for service and broader usefulness for all organizations concerned.

Publications and Information—Through circular letters on various subjects, members are kept informed of associational and general textile activities. Connections are maintained with the Departments of Commerce, Agriculture, and Labor of the United States, and with similar departments of the various states (particularly the cotton-growing states), also with the National Industrial Conference Board, other trade associations, research organizations, business bureaus, and many other agencies.

Informing the Public—Another important function of the executive offices of the Association is presenting to the public the real facts concerning the cotton industry. With so many wild philosophies and plausible, yet dangerous, theories constantly placed before the public mind by so-called reformers, the association must be ever on the alert to correct and offset these by means of carefully prepared articles, not only showing the fundamental fallacies of such propaganda but substituting constructive facts upon which right thinking may be based.

Cotton Textile Institute—No review of the association's work can be called complete without reference to The Cotton-Textile Institute. The members of the manufacturers association gave their time and thought to its organization, which has now been so successfully accomplished. While the two organizations work together their aims and purposes are quite distinct. Location, history, environment, tradition, and notably the preponderance of the Anglo-Saxon element among those constituting the South's industrial workers have forever decreed that southern ideals, management, and industrial philosophy shall somewhat differ from those of other sections. For this and many other obvious reasons a southern clearing-house for problems affecting southern industry is indispensable.

There has been in this association that common bond that has tended throughout the years to take a widely segregated and scattered industry and bring it into unity. I believe it is safe to say that the Cotton-Textile Institute, which is now a national organization, binding the northern and southern branches of the industry into a social compact, would never have been possible had it not been for the co-operative lessons and co-operative efforts learned by the southern mills in the American Cotton Manufacturers Association.

Some of the duties that absorb the attention of the American Cotton Manufacturers Association today are the questions of national legislation, traffic regulations, cotton rules and cotton arbitrations, publicity, gathering and disseminating information for the mills, a clearing house for southern problems, and a focal place drawing around it all the southern mill interests.

The Farmers' Problem

The American cotton farmer is losing normally $10,000,000 annually in tire trade business to foreign growth because of his inability to produce a consistently uniform long staple cotton, J. M. Slattery, manager of the rubber and cotton department, the Fisk Rubber Corporation, declared recently. He urged immediate governmental assistance in recapturing this market for domestic producers.

At the same time, Colonel Charles E. Speaks, president of the corporation, in a letter to all United States Senators, offered full co-operation of his company's technical research laboratories in any action that might be taken toward solving this problem.

"With millions of dollars being spent today on crop control, the government could profitably establish a research program to discover why United States cotton varies so widely in quality from year to year. The current staple cotton crop again lacks this uniformity," Mr. Slattery said.

Little improvement has been made here in 20 years, he pointed out, "yet the Egyptian government has met each issue of deterioration by bringing out newer varieties to keep pace with the world demand for a standard, long staple cotton."

Quality Cotton for Tires

The tire industry, he explained, must have this quality cotton if it is to build safety into automobile and truck tires. The cotton is made into cord, which in turn is used in building tire plies. Only the strongest cord can be used.

When domestic sources fail, it is necessary for the industry to purchase its cotton elsewhere, and the American farmer loses many millions of dollars through no fault of his own. The cotton crop of 1931-32 was the most disastrous from the point of quality that had been seen in many years. Yet the 1934-35 crop was excellent.

Consistently high quality would keep this money in the home market, thus benefiting both the cotton producer and the tire consumer, Mr. Slattery concluded.

National Cotton Week

EVERYONE KNOWS the 1937 cotton crop broke all records with its 18,934,153 bales. And by the same token, the carry-over will be nearly 13,000,000 bales—more than enough for a normal year's demand, since foreign markets are so rapidly dwindling. To reduce this threatened carry-over is the immediate problem that confronts the cotton industry today.

We are all looking to National Cotton Week to reduce inventories and to hasten the return of more normal operations in the mills. In setting this week from May 30 to June 4, we have picked the time when summer cottons are 'wanted merchandise'. Without the nation-wide promotion we are putting back of National Cotton Week this would still be an opportune occasion for cotton selling. All indications of this year's hearty co-operation in pushing this annual sales event indicate that it will reach sales heights never before achieved.

For months now, consumers have been putting off needed household purchases. Replacements have become an absolute necessity. And with the low prices which will mark the National Cotton Week—1938 offerings, promotions will provide a practical means for inducing customers to satisfy their pent-up cotton-textile needs.

With cotton as America's largest industry, its plight becomes a menace to our national prosperity—its success, a boom to increased earning and spending. One out of every ten people in this vast country makes a complete livelihood out of cotton—and this figure only includes that section of the industry from farmers through to Worth Street's primary market of distribution.

With the earning power of over 12,000,000 at stake, as well as the large investments involved, the success that can be engendered by National Cotton Week assumes the importance of a national crusade. And that is the strong, red, white and blue theme on which National Cotton Week, its posters and promotion have been founded. The selling story is briefly put: "Buy Cottons Now . . . Save Money . . . Speed Recovery". Governors of southern states are issuing official proclamations of National Cotton Week, and urging governors of other states to follow their example. For after all, the State of Michigan cannot sell autobiles to members of the cotton industry unless their product is bringing them extra spending power.

A new and important factor in the success of National Cotton Week has entered the field this year for the first time. The country's leading chains joined in the Cotton Consumption Council, organized at Atlanta on March 3, have set their aim to double their 1937 sales of cotton. Their enthusiasm is keen and their co-operation unbounded! The 8,500 Institute of Distribution stores alone sold over $600,000,000 in cottons last year. And the Council includes both the National Associations of Food Chain Stores and Drug Chain Stores. They will push cotton sales to new heights this year according to present indications.

The Cotton-Textile Institute is working overtime to keep abreast of the demands. Thousands more posters have already been ordered than in any previous year. Store Idea Books are being used in doubled quantity over our largest year.

Collateral interests such as soap manufacturers, washing machine manufacturers, laundries, linen supply houses and others have rallied to the cause with unprecedented co-operation.

With the entire industry fighting shoulder to shoulder, National Cotton Week gives more than fair promise of being the biggest retail sales event of 1938—selling more cottons—speeding recovery—and cutting into the prospective carry-over which in the last analysis must finally be used—the sooner the better!

Cotton Towels for Cotton Mills

Especially Contributed to COTTON

THIS YEAR, as for several years past, The Cotton-Textile Institute will make a great effort to enlist the support of manufacturers, jobbers and retailers in National Cotton Week and the promotion of cotton goods.

For the past two years Wellington Sears Company has been running an advertising campaign to help the linen supply industry expand the commercial and industrial use of cotton towel service in offices, stores and factories.

But because the paper towel people have sold some paper towels to a few cotton mills they have recently advertised "paper towels even in cotton mills".

Now, that is a condition which no cotton man who wants to see his industry maintain its position should tolerate. No matter what the product made by a cotton mill it should certainly not help the paper industry by using paper towels for its employees.

A cotton towel is infinitely superior to a paper towel. If you doubt that, there are two simple tests. Drop half a teaspoonful of water on a cotton towel, watch it absorb, then drop an equal amount of water on a paper towel, see how long it takes to be completely absorbed. Or simpler still, just try to dry your face on a paper towel. When you have used a few paper towels and fuzzed up your beard and your face is still damp you will know what we mean.

In almost every town there is a linen supply dealer who can render you an economical satisfactory cotton towel service in your offices and employees' rest rooms.

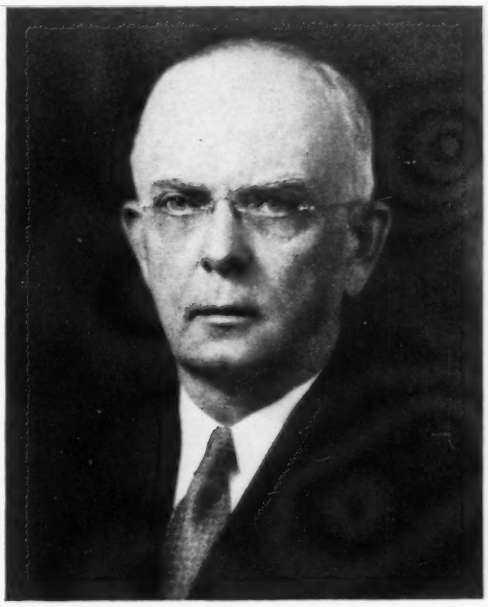
Don't let the cotton industry down and don't furnish advertising copy for a competitive industry.

Stop on Red—Go on Green

A Word Picture and Brief Biography of the New President of the American Cotton Manufacturers Association . .

IN FEBRUARY 1904, John M. Geer of Easley entered the Norwood Bank at Greenville, S. C., to ask the advice of Mr. McGee, the cashier, as to a likely young man for the place of secretary at the Easley Cotton Mills. It was dinner-time, and the cashier was out; the only occupant of the bank was a quiet-mannered, courteous young man of 22 years at his post in the teller's cage. Awaiting the cashier's return, Mr. Geer carried on a casual conversation with the pleasant young teller, who was unaware of the visitor's mission.

That afternoon, after his talk with Mr. Geer, the cashier told his young teller that he had recommended him to Mr. Geer and advised him seriously to consider the place. That was on a Friday. The bank teller, whose every major act and decision since, in a full and successful career, has been marked by thoroughness and clear judgment founded upon a base of character and conservatism, received Mr. Geer's offer, analyzed it and his ability to perform it. Never before, nor since, is there on record evidence of precipitate or hurried action on his part, but he well understood that the job must be filled immediately. He made his decision without haste, and on the following Monday started in on the new job.



Thus it was that John Henry Cheatham, then the young bank teller, who has just been elected president of the American Cotton Manufacturers Association, entered upon his textile career.

Between these two significant events lies a record of achievement and service which may properly be explored and which involves a study of the man who assumes the official leadership of this industry under the prevailing times of stress in receiving the highest honor within the power of his fellow southern textile manufacturers as a body to bestow.

First, let us look at the record. John Cheatham was born, on July 6, 1882, on a typical South Carolina farm in what is now Greenwood County. Incidentally, one of his boyhood friends was James C. Self of Greenwood. His parents were of solid Carolina stock, for several generations cotton farmers. After attending Furman University, where, incidentally, he studied English under the beloved Ben Geer, John took a job in a Greenville drug store at $6.00 a week. An early aptitude for financial thinking, along with a slightly increased salary, made the bank job attractive to him. He quickly sensed the shortcomings of the system of records he found at the bank, and had devised, instituted and put in operation a much simpler and more efficient system, and was making substantial progress as a banker, when Mr. Geer came in, liked his manner and personality, learned of his high character and integrity, his thorough, competent methods, and hired him to go to Easley.

Young Cheatham was at Easley for 12 years, progressively assuming more and more of the responsibility of the corporation, which experienced a substantial growth during that time, while orienting himself to the textile business, he brought to Easley a natural ability in management, a sense of intuitive judgment. He also displayed an intense application to the task at hand, and a fundamental and abiding adherence to the sound business principle that to maintain operations, provide employment, remain successful and experience genuine progress, the essential requirement of a business is to earn a profit. He manifested early an astute sense of values, a policy of conservative caution coupled with a courage to proceed when the green signal light flashed.

Mr. Geer held a majority interest in a little mill at Hartwell, Ga., which had for various reasons never been able to make its way. In 1916, wearying of its problems, he suggested that Cheatham take it over. As a result of some careful and deliberate negotiations, Cheatham disposed of his modest holdings in Easley, and acquired the Hartwell Mills. At that stage, his ready cash was not extensive, but his established integrity, business qualifications and managerial ability enabled him to borrow sufficient money to effect the deal. It is getting a little ahead of our story—but provides a penetrating index to the man—to point out that Hartwell Mills since have never failed to declare a dividend, and, up until the Roosevelt recession, had never run short time.

In 1919, the affairs of the Georgia Cotton Mills, at Griffin, Ga., had become badly involved, and the Atlanta bankers who were

holding the paper looked around for competent outside assistance. Cheatham, by that time, had Hartwell in splendid operating condition, but saw a broader opportunity in the Atlanta bankers' proposal, and in the fall of 1919, went to Griffin, where with sound management and direction he cleared up the situation and restored the Georgia Cotton Mills, of which he was made president and treasurer, on an even keel.

In 1925, the owners of the Kincaid Mfg. Company at Griffin decided to sell, and came to Cheatham with a proposition, which he studied carefully and accepted, with the result that this company was bought by the Georgia Cotton Mills, and the Georgia-Kincaid Mills were formed. The old Kincaid mill had, in 1922, established in Griffin the Lowell Bleachery South, in conjunction with the Lowell Bleachery of Massachusetts, and their minority holdings in the bleachery of course were included in the merger. But two years later, in 1927, Cheatham acquired the control for Georgia-Kincaid.

He had not relinquished his interest, financial or otherwise, in his first love, Hartwell, however, and in 1921-22, at the request of the operators of the Toccoa (Ga.) Cotton Mills, he acquired this property and established it as a branch of Hartwell, and it, like its sister unit, has since been a continuously successful plant. In 1929, he served as receiver of the Griffin Mfg. Company, selling this plant to the Hightowers of Thomaston.

In 1929 B. R. Blakely and associates sold a controlling interest in the Rushton Cotton Mills of Griffin, to Cheatham, and he assumed the presidency of this plant independent of his other connections.

To summarize, Cheatham now occupies the active position as president and treasurer of the following mills: Georgia-Kincaid Mills, 76,000 spindles and 3,000 looms; Hartwell Mills, 16,000 spindles and 448 looms; Rushton Cotton Mills, 16,000 spindles and 420 looms; and Lowell Bleachery South. Georgia-Kincaid, with five plants in Griffin, manufactures the famous Dundee line of toweling, as well as corduroys, canton flannel, birds-eye, table tops, etc. Rushton at Griffin is on dobby goods, and Hartwell, with plants at Hartwell and Toccoa, specializes on bag goods. The bleachery at Griffin processes a complete line of finishes, including bleaching, dyeing, Sanforizing, napping and mercerizing.

The foregoing record is given in detail first because Cheatham has always gone about his work in so quiet and unostentatious a manner that it is doubtful whether the full extent of his position and accomplishments is generally known. In the second place, it provides a necessary framework for a study of the man.

THE FURMAN BASEBALL TEAM OF 1900

The figure standing second from the right, in the back row, wearing the turtleneck sweater, is John Cheatham in 1900. Incidentally, Chester Hatch, now president of Brandon Corp., is seen second from the left in the back row, also wearing a "fashionable" sweater, and Blair Rice, now president of Blair Mills, Belton, S. C., is fourth from the left in the second row . .

John Cheatham (he never acquired a nick-name) is a quiet, unassuming man, of medium stature, sparse brown hair, with a strength of character and integrity that his countenance at once reveals. Simple and direct in his tastes, contacts and methods, wholly devoid of affectation or complex, he pursues his activities efficiently and effectively. The councils of the industry know him as a pleasant, agreeable associate, always punctual, always reliable, whose support in any constructive program can be counted on, and who in unadorned, fundamental analysis may be relied on for commonsense advice, counsel and assistance in getting to the meat of a proposition and working out a solution. His contemporaries, competitors and customers consider him to be a genuinely successful, competent business executive, "a man who knows intuitively when to buy and when to sell"; he is not a speculator, sails close by the wind when it seems advisable; he observes both the red and green traffic lights of sane business.

Cheatham maintains personal supervision and direction of the affairs of the ramified organization which he actively heads. He sets the policy, and from day to day keeps in close first-hand contact with the operating details. A regularity in his own habits exercises an involuntary discipline in his organization. Yet there is no restrictive formality apparent. Work at the general offices in Griffin proceeds in an effortless fashion, with neither too much informality nor too much formality to handicap results. Cheatham devotes practically his entire time to the direction of his mills. He reads all incoming mail; he doesn't answer it all, of course, nor direct its handling, for he has surrounded himself with a group of competent executives, most of whom have been with him for

years, and on whom he relies in their respective spheres, but he does want to keep up with what is going on, and finds this one good way of doing so. His interest in the many phases of the business is not an indication of curiosity, or of interference, but rather the natural result of wanting to draw upon a full understanding in reaching a decision and setting a policy. His daily associates know him as an earnest, clear-thinking, hard-working and effective executive, who sets the example of a true leader; fair in giving reward and credit; reasonable in his demands; thoroughly honest in all of his dealings; tolerant and considerate, slow to complain or criticize; an honest business man and inspiring and stimulating by genuine example rather than by word.

His close attention to his regular work does not imply that Cheatham is in a shell of business. He has served his industry as president of the Cotton Manufacturers Association of Georgia, and is now vice-president of The Cotton-Textile Institute. Locally, he is a useful citizen. Some years ago, he was awarded a loving cup as Griffin's leading citizen. He is a working member of the Griffin Rotary Club, a member of the First Baptist Church of Griffin, where for years he has been chairman of the board of deacons and superintendent of the flourishing Sunday School. During the bank holiday of 1933, Griffin's banking prospects appeared rather discouraging, and

Informal "Shot" of Cheatham at His Desk in Griffin
The pipe, the telephone and the mail are characteristic implements

while the moratorium was still in effect, Cheatham, with some associates, applied for a charter for The State Bank of Griffin, and this institution has had a phenomenal growth as the statement of December 31, 1937, indicates.

Cheatham belongs to that group of business executives who find in business ample thrill and excitement, and has no outside hobby in the generally accepted sense of the word. He does like to hunt quail and fish, finding in these activities, in the congenial company of personal friends, his chief personal diversion and relaxation—although his inherent tendency to go to the office prevents his enjoying them as much as he should. He belongs to the Satilla River Fishing Club in South Georgia, and frequently, when others are fishing or engaged in argumentative conversation, Cheatham can be seen across the club porch, in a rocking chair, calmly smoking his pipe in contemplation and quiet enjoyment in his associations. His equilibrium is seldom disturbed. He has a slight mannerism of smacking his lips and licking his tongue out slightly when he begins to speak. This mannerism is the only evidence of perturbation. When disturbed his lips smack a little faster and his tongue licks at an increased tempo, but there is no other facial or vocal evidence.

Unduly modest and retiring, with an enviable complacency of outlook, Cheatham's essential integrity and the clarity of his life represent his most prominent traits to those who know him.

Back in Easley, on January 20, 1909, Cheatham was married to Miss Janye Jackson, of Amelia, Va. Five splendid children have blessed their union: John McGee Cheatham, 25; Robert W. Cheatham, 23; Virginia, 20; John Henry, Jr., 14; and Richard Burts, 11. Cheatham, Sr., is devoted to his family and home life, and his evenings are usually spent there, and his home life at once draws from and contributes to his calmness of disposition, serenity and strength of character and integrity and honesty of thought and purpose.

Foresight

The men in a certain department had to walk clear to the opposite end of the long factory building to punch a time-clock; then retrace their steps to leave the plant. As they were required to remain in their department until the whistle blew, this long hike to the time-clock meant that they were the last ones in the plant to get out at quitting time.

Appreciating that this condition was aggravating, their foreman sold the idea to the management of locating an extra time-clock more conveniently. His foresight in not permitting a grievance to grow will pay for the time-clock in a short time through minutes saved and better feeling.

What do you think it may be worth in dollars and cents to correct an aggravating condition before a small grievance grows big?

—"How to Handle Grievances"; Elliott Service Co., Inc.

"Jumping the Gun"

The man complained to his foreman that he could not make out on the piece rate set.

"What do you mean you can't make out?" the foreman snapped back. "Those rates are set by careful time study and they have to be right. I'm not going to listen to any complaint on that rate until you give it a fair trial!"

After this blunt repulse the man went over the foreman's head to the superintendent. The superintendent ordered a re-check of the rate. A slight error in the arithmetic of computing the rate was found and corrected.

1. What do you think has happened to that foreman's prestige?

2. Is there any reason why he should have "muffed" his chance to straighten out this error?

—"How to Handle Grievances": Elliott Service Co., Inc.

American Association's Augusta Meeting is Stimulating and Enjoyable Event

"A CONVENTION of education and enlightenment for the public as well as ourselves; to portray the economic and social contributions of the southern textile industry to the South and to the nation"—this was the theme designed by Bob Henry for the annual meeting of the American Cotton Manufacturers Association, in Augusta, Ga., at the Bon Air Vanderbilt Hotel, on May 29 and 30. The program measured well up to its theme, distinguished speakers from within and without the industry spoke strongly and convincingly to the point, and the record-breaking attendance of mill men and others enjoyed a profitable and stimulating convention.

The program was not heavy, in the digestible sense, nor was it frothy—but provided a well balanced, strengthening and inspiring occasion as a striking demonstration of the forcefulness, effectiveness and essentiality of this trade organization.

Cheatham Is New President

John H. Cheatham, president and treasurer, Georgia-Kincaid Mills, Griffin, Ga., was named as the new president of the association, succeeding Robert E. Henry, president, Dunean Mills, Greenville, S. C., who ably presided at Augusta. (See biographical sketch of Mr. Cheatham, page 85 of this issue of COTTON.)

K. P. Lewis, president, Erwin Cotton Mills Co., Durham, N. C., was elevated to first vice-president of the Association; and Robert West, president, Riverside & Dan River Cotton Mills, Danville, Va., was named to succeed Mr. Lewis as second vice-president. W. M. McLaurine was re-elected secretary-treasurer, and five members of the board of governors, whose names follow, were elected:

Scott Russell, executive vice-president, Bibb Mfg. Co., Macon, Ga.; W. H. Entwistle, general manager, Entwistle Mfg. Co., Rockingham, N. C.; C. A. Cannon, president, Cannon Mills, Inc., Kannapolis, N. C.; Hugh Comer, vice-president, Avondale Mills, Sylacauga, Ala.; and Walter S. Montgomery, president, Spartan Mills, Spartanburg, S. C. To fill the unexpired term of Mr. West on the board, the association named Arthur L. Emery, vice-president and general manager, Brookside Mills, Knoxville, Tenn.

At the first session on Friday morning, following the invocation by Rev. John E. Hines of Augusta, the address of welcome by R. E. Allen, Jr., Mayor of Augusta, and the response by Robert West, Secretary W. M. McLaurine presented his annual report, reflecting another year of energetic and effective activity in the interests of the southern textile industry.

Julian Miller's Address

Julian S. Miller, editor of the *Charlotte Observer*, was the first featured speaker on the subject of the industry's contribution to southern and national civilization. Dr. Miller presented one of the ablest discussions the association has enjoyed in years. He sharply condemned unfair, biased and prejudiced criticism of the South and its industry, strongly refuting "with the facts" such vicious criticisms and attacks, including the one recently heard "from illustrious lips" at Gainesville, Ga. Referring to President Roosevelt's Gainesville charge of feudalism, the speaker showed that southern industry pays between 35 and 40 per cent of its income in wages, against a national average of 18 per cent, declaring that "if there is feudalism in this country, it is not in the South as charged."

While critical in the main of the methods adopted by the present administration, Dr. Miller freely admitted and plead for some practical form of social control in industry and business, declaring that government and business must live together happily and co-operatively. However, he added, "you can't expect anything like that to happen for at least two years yet." He strongly defended the political economy of the South and southern industry, citing how the cotton mill wage dollar permeates every element of trade. "Can you," he asked, "conceive of any other dollar that goes in more different directions of trade, that travels more distantly, that returns with greater

KEMP P. LEWIS, president, Erwin Cotton Mills Company, West Durham, N. C., who was elevated to the position of first vice-president of the American Cotton Manufacturers Association . . . . . .

increment when it comes back, that is more creative in its content, that builds more homes, that feeds more mouths, that shelters more heads, that sends more children to school, that pays more taxes to more different units of government, that builds more roads, that erects more hospitals, that buys more goods from other markets, that provides a higher range of living for more of our citizens, or one that, in a word, lies more firmly and irreplaceably at the foundation of the South's whole civilization?"

Dr. Miller submitted as simple economics and plain backyard common sense the fact that "the only process by which the wages and mass purchasing power of the people can be lifted and expanded is that of the creation of more and not less of essential goods and commodities." He declared that, "The South may be more stupid than some other areas of the country, but down here we have never yet had the brains to figure out how the mass purchasing power of a people can be increased except by producing more goods that can be sold at such a price as will automatically step-up consumer demand."

Dr. Brittain on Social Contribution

M. L. Brittain, president of the Georgia School of Technology, Atlanta, one of the country's foremost educators, followed Dr. Miller, speaking under the subject, "A Friend Views the Southern Textile Industry". Dr. Brittain sharply condemned the unfair criticism to which the South has been subjected in biased articles, speeches and magazine treatments. He said he could usually tell in advance what would be said of the South by learning of the source of the criticism or the publication involved. He paid high tribute to the socializing force of the mill in southern

industry, to the great development of educational facilities and principles in the mill towns, and to their contribution to the social development of the section.

President Henry's Address

Robert E. Henry, president of the Association, was the final speaker of the morning, following Dr. Miller and Dr. Brittain with a splendid tribute to the southern textile workers. Speaking of this group, he said in part:

"They were pioneers when their ancestors came to this country; they were pioneers in their migration; they were pioneers when they left agricultural life. The attitude of the pioneer is purposefulness in life and determination to succeed over all hazards. There is bravery in heart and conservative thinking in action. The southern textile worker has had to plan conservatively. His training and heredity have made him conservative. For many long years he has been, and still is, an individualist in all of his acts and thoughts. He still believes in individual action and in local self government. He is rather retiring in his disposition and not given to great enthusiasms and emotions. * * *

"The southern textile worker is still a religious person. Practically all of our early settlers were deeply religious. Some of the descendants of the early settlers have deflected and become so liberal in their religious life that they bear but few earmarks of their early sires and some have even rejected religion and gone after philosophies and cults and

ROBERT E. HENRY, president of Dunean Mills, Greenville, S. C., who presided at the Augusta meeting as retiring president of the Association

isms that clash with the fireside philosophy which has made this nation great. But the South is known as the Bible Belt, and no greater exponent of fundamental religion is found anywhere than among the southern textile workers.

"In education they are ambitious. Their needs and desires have caused educational opportunities to be afforded to thousands who might have otherwise been slower in securing advantages. The grammar schools and the high schools of the southern states have been crowded with their children eager and anxious to improve their minds. The vocational educational opportunities of the South have found no group more ready or more willing to respond. Each year large numbers of the graduates of these high schools in mill areas attend college. In North Carolina one high school in a mill town furnished a higher percentage of graduates to colleges in the state than any other city or county high school."

Speaking of the economic attitude of the southern mill worker, Mr. Henry said the group carries the typical classes of humanity. "It has a high group of thrifty people who are good managers and save and accumulate. It has a middle group who work and spend and who do not save, nor do they often get destitute except in such rigorous times as these when all people are suffering from depressing economic conditions. There is a third group of never-do-wells, bad managers, and irresponsibles, who are often in trouble. The average is not different from other people. It is humanity expressing itself in the law of averages.

"In Rhyne's study of southern mill workers, he found that in the group which he studied, 30 per cent of the wage earners either owned their homes or rented dwellings not owned by the mill. He also found in the same study 12.2 per cent of the families studied owned their homes, and stated that this is as high a percentage of homeowners as would ordinarily be found among workers in any of the well established industries. This study was published in 1930. It is quite probable that the percentage of home ownership has increased since that time.

"The southern textile worker, viewed from every angle, is seen to be a splendid citizen of equal rank with the great divisions of society which make up the social and economic South. Only those who would exploit him for political or financial profit attempt to drag him as a forgotten and depressed character before the public. I admire the harmonious nature of his life. While he is determined, strong-willed and vigorous in the defense of right, I believe there is no more harmonious group of people in America than will be found in the cotton mill villages of the South."

"Some Thoughts on the Future of Cotton"

Claudius Murchison, president of The Cotton-Textile Institute, was the chief speaker at the Saturday morning session, discussing ably and practically some of the major competitive and internal economic problems of cotton textiles. He cited the recent major trends in increased foreign growing and consumption of cotton, but demonstrated that these are merely displacing American production and not increasing world production. He traced the development of rayon to its present gigantic place, and the inroads of paper products into former cotton-goods markets. He treated these subjects with no resentment, but rather in admiration of the resourcefulness ness and success of these other industries. He showed how rayon, "starting with a vile product", employed scientific skill and expensive laboratories in its development; how the industry created a merchandising sponsorship of the goods through to the final consumer, with styling, consumer advertising, etc. The paper industry, he pointed out, has been successful primarily because of a willingness to finance on a large scale the exploration of new uses for paper. The Institute of Paper Chemistry is financed by some 62 paper companies and has an annual operating budget of approximately $350,000, and many paper companies engage heavily in research activities on their own account. "The answer to why the paper industry has moved forward is persistent, organized, scientific effort, the price of which the industry has been willing to pay."

Reviewing the handicaps of the cotton-textile industry, Dr. Murchison cited the large number of small units, too small for individual activity; the fact that a great majority do not produce finished goods; and the tradition of the industry wherein a market demand for its products has been self-made; as well as a high degree of confusion resulting from changes in territorial distribution, changes in operating time, heavy losses in export trade, etc., which have combined to reduce the industry's capital structure and equipment.

He pointed out an opportunity, however, in the adaptation of rayon staple to cotton spinning and weaving machinery, declaring that "we find no economic motive strong enough to resist the gradual inclusion within the industry of this new competitive material."

Dr. Murchison declared that the problem of the cotton industry involves the preservation of a major national asset, and that the problem is not one of the industry alone, but should be burned into the minds of the growers, the shippers, the transportation companies, the banks, and above all, the men who control the legislative policies of our government. "It seems the very height of insensitive stupidity to impose upon the men who run the spindles and the looms the full responsibility, financially and morally, to bear aloft the destiny of cotton."

However, the speaker declared, we must assume the leadership, and he proposed three distinct lines of action. "The first of these is scientific laboratory experimentation which has for its aim not only the development of new fabric qualities and finishes, but also the application of existing fabrics to new uses." "The second need is for improvement in the merchandising of many of our products, particularly those used for apparel purposes and for household furnishings. When I speak of improved merchandising I am not referring to the mechanics of distribution; I have in mind the merchandising qualities o

the fabric itself. A fabric or an article meets the desired standard of excellence when it serves the exact purpose which the consumer has in mind. The consumer has a right to know in advance whether that purpose will be served." "The third fundamental need is for more effective effort in directing public attention to the values of cotton products. We commonly speak of this as cotton promotion. New merchandising concepts and new laboratory discoveries are valueless unless they are united with commercial exploitation."

On the point of promotional work, Dr. Murchison cited the handicap of insufficient funds. The cent-a-bale program, started last year, has been affected by decreased consumption, plus the fact that con tributing shippers contribute only on those bales going to contributing mills, and contributing mills pay only on bales bought from contributing shippers. He suggested that a change in procedure that would base contributions on total sales or consumption would double the industry's income from this source for promotional purposes. He referred also to the recent impetus to cotton promotion in the formation of the Cotton Consumption Council, embracing the chain-store associations whose members market annually more than $600,000,000 worth of cotton products.

The concluding portion of the Saturday session comprised the association's business meeting. Mr.

ROBERT WEST, president, Riverside & Dan River Cotton Mills, Danville, Va., who was elected second vice-president of the American Cotton Manufacturers Association . . .

McLaurine read the reports of the cotton committee —A. K. Winget, chairman—and the general arbitration board—George P. Ray, chairman. R. R. West, chairman of the special traffic committee, reported the committee's recommendations, which had been approved by the board of government, calling for the elimination of the association's traffic department as such, but for the employment of expert counsel in connection with traffic matters affecting the industry as a whole. He explained that the agency that has been acting as the association's traffic department serves also the state associations of the two Carolinas, as well as many individual mills, and that the Georgia and Alabama associations had decided to operate their own traffic department jointly. The association, under the committee's report, which was unanimously adopted, may now call upon either of these traffic bureaus for specific services at fixed charges per service.

Thomas H. Webb, W. M. McLaurine and David Clark reported for and spoke in behalf of the ACMA student loan fund, organized last year. Loans have been made to a number of worthy applicants to aid in securing textile education, and members were urged to augment the fund. Stuart W. Cramer reported briefly on behalf of the association's participation in the Textile Foundation. The resolutions submitted for the resolutions committee by John H. Cheatham, chairman, were two—one in memoriam of deceased members; one expressing thanks to those participating in the Augusta program.

Herman Cone, of Greensboro, presented to retiring President Henry, for himself and Mrs. Henry, a beautiful silver table bowl and candlesticks as a token of esteem and affection from the membership of the association.

On Thursday evening, preceding the opening of the convention, a most attractive style show was presented by Miss Catherine Eloise Cleveland, consumer consultant for The Cotton-Textile Institute. A large number of Augusta girls modeled a collection of outstanding fashions as interpreted by important designers of Paris and New York, illustrating the predominance and versatility of styled cottons for Summer 1938.

In the Green Room of the hotel there was an exhibit of some of the fabrics and other products made by a large number of southern textile mills.

The visiting ladies at the convention were delightfully entertained by a group of ladies from the Augusta Woman's Club during their stay.

The annual banquet of the association, held on Friday evening with President Robert E. Henry as toastmaster, provided another occasion of entertainment. John L. Davis, a Methodist minister of New York City, delivered a humorous address. Music for the banquet was provided by a group of negro students from Bettis Academy, near Augusta. A dance was held for association guests following the banquet.

Foreman Short Circuited

A man went over his foreman's head to the superintendent and asked for a transfer to another department because he felt that his foreman was holding him back.

"I'm just stuck in a rut there, and I think I can swing a better job if I'm given a chance," the worker complained.

"Have you talked to your foreman about it?" the superintendent inquired.

"No, I haven't," the man explained, "because I don't think he'd like to have to break in another man to take my place."

Whether the worker is right or wrong in his assumption that he wouldn't get fair consideration of his case from his foreman, there still are several questions that arise.

1. Why has the foreman failed to win his confidence?
2. Why hasn't the foreman got close enough to the man to know about his ambitions?
3. How can a foreman be sure to get the first opportunity to settle grievances?

—"How to Handle Grievances"; Elliott Service Co., Inc.

Electric Hand Tools

1. Keep tools in good condition, cleaned, oiled and repaired.
2. It is good practice to use an extra wire to ground the tool casing when in use, if one has not been built in.
3. Use only approved and inspected extension cord.
4. Always examine both the cord and connections carefully before using. Damaged cord and defective plugs and switches may be dangerous.
5. Never hang an extension cord over nails or other sharp edges; or allow it to become kinked; or leave it where a truck may run over it. Wire or insulation will be damaged.
6. Protect the cord against contact with oil, hot surfaces, and chemicals. These may damage the insulation.
7. It is bad practice to patch any serious injury to cord insulation with tape. Shorten the cord or get a new one.
8. Wear goggles while using electric hand tools if there is any danger of flying particles.
9. Do not use a portable electric tool in the presence of inflammable vapors or gases.
10. Store extension cord in a clean dry place where it can lie loosely coiled.

—*National Safety Council*

Carding and Spinning Topics Debated at Greenville Meeting of STA

CARDING AND SPINNING were discussed at the meeting of the South Carolina division of the Southern Textile Association, held Saturday morning, April 30, at the Poinsett Hotel, Greenville, S. C. Joe C. Cobb, Easley, S. C., general chairman of the division, and chairman of the board of governors of the Southern Textile Association, presided, and also led that part of the meeting pertaining to spinning. R. T. Stutts, superintendent, Woodside Cotton Mills Company, Simpsonville, S. C., led the discussion on carding. Well over a hundred mill men were present, and a number of Clemson College textile students listened in on the round table discussions. J. A. Lyons, superintendent, Orr Cotton Mills, Anderson, was elected general chairman for the ensuing year.

H. H. Willis, head of the textile department at Clemson (S. C.) College, was the speaker of the occasion. He told of the plans for improving the textile school at Clemson by the addition of new machinery as soon as the new $435,000 textile building is completed. Mr. Willis forcefully brought out the need for college trained men in the textile industry, especially in the field of test work at the plants. He advised the division of the work of the Textile Foundation in the reorganization of textile courses, brought about by semi-annual meetings of the deans of all the textile schools. Books are being prepared on phases of the textile industry outside of the realm of actual manufacturing, such as economic, cost finding, management, and sales.

Carding

The first carding question was *What is the best method of eliminating neps?* W. E. Hammond, superintendent, Balfour (N. C.) Mills, advised that the only place that neps can be eliminated is in the card. This can be brought about by making the proper settings on the card, and by adjusting the production of the card so that the card will have time to do the work properly. Cards running on low production have a better chance to eliminate neps than those running with a high production. It is also necessary to check on the card grinders to see that they are performing their jobs properly. Mr. Hammond explained that though the settings must be checked and kept right, it is often necessary to set each card according to its own condition. The mote knives are also an important element in eliminating neps. "The closer the settings are and the slower the card goes, the better we can eliminate the neps," he finished.

Mr. Willis explained that some cotton has neps before it is ginned, being caused by immature fibers, but that often the ginning operation itself will cause many neps in the stock. Another cause of neps occurs at the card; he advocates running a light sliver to eliminate the neps. The chairman asked if in changing from 1-inch stock to 1⅛-inch are more neps noticed. T. C. Drew said that when he changed from 1-inch to long staple he has more neps, but that he has also learned that there were more neps in the long staple cotton that he was running. In this case of changing to long staple cotton he found it necessary to grind the cards more often and to strip more often. He opened the topping plate and closed the setting on the front plate in order to remove more neps; this procedure helped but it did not remove all the neps.

The chairman requested information as to whether oil spray will or will not cause neps. F. D. Lockman, superintendent, Monarch Mills, Lockhart, S. C., has never been able to use the oil spray. He said when cotton is found hanging around in streaks, it is caused either by oil splashing out of the bearings, or by water dripping overhead. Mr. Hammond,

R. T. Stutts

Joe C. Cobb

who has used oil spray for 8 years and would not be without it, said he knew that oil dripping would cause neps, but that he did not think oil spray would do so. He advised using 3/10 of one per cent (.3) oil in the spray, adding that if the oil is used in too high a percentage it will naturally cause difficulty in the card room. John S. Lockman, also of the Monarch Mills, Lockhart, humorously said that some cards have to have an electric shaver to remove the neps, but he believes most carders can remove the neps from the stock if the owners of the mills do not object to too much white cotton being removed as strips. There is a limit as to the amount of waste a mill can remove, from an economic standpoint, and a certain amount of neps will have to be contended with.

Effect of Blending Reserves

Next discussed was the effect on evenness and cleanliness of the laps when blending reserves are used on single-process pickers. J. T. Bray has had the blending reserves for two years and is getting more even and cleaner laps now than before they were installed. A. H. Cottingham, general manager, Victor-Monaghan Company, has all of his pickers equipped with the blending reserves and has noticed a more even picker lap since their installation. He now loses only one or two laps a week because of non-standard weight; also, the evenness yard per yard is better. Mr. Cottingham stated he would not want to be without the blending reserves at any cost, but suggested that the mills continue, as a matter of manufacturing policy, to weigh the laps from the pickers. C. M. Padgett, Brandon Corporation, Woodruff, S. C., has three pickers, two of which are equipped with the blending reserves, and he notices a marked improvement in the laps from the pickers having the blending reserves—they are much even-

Reported by John C. Fonville.

er. Troy H. Carter, Greer (S. C.) plant, Victor Monaghan Company, has had experience with pickers both with and without the blending reserves and is able to keep the laps within a quarter pound variation by using the blending reserves, whereas on the pickers not equipped with blending reserves the variation is about one-half pound each way.

Speed of the Licker-In

Should the r.p.m. of the lickers-in be the same for all grades and staples of cotton? For all feed roll speeds, due either to draft gear or production gear changes? was the next question. Gaston Gage, member of the faculty of the Clemson College textile school, said that mills change the draft and production of cards, but rarely give any consideration to the speeds of the lickers-in, usually keeping the speeds constant, except, of course, when Pima cotton is being run and the speed is reduced from around 450 r.p.m. to 350 r.p.m. According to Mr. Gage, it is the amount of cotton that passes through the card that determines the quality of the work. The main difference lies in he relative speed of the feed roll, when the speed of the licker-in is considered, and it is

F. D. Lockman

N. G. Hardie

the sheet of cotton on the licker-in that must be taken into consideration. There is a proper amount of cotton to be kept on the licker-in at all times, but Mr. Gage did not attempt to state how much this should be. He did mention that if the speed of the licker-in is too high the stock would be cut and injured. Joe Lyons keeps the speed of the licker-in the same, whether he is running ⅞-inch or 1⅛-inch stock, but changes the production of the card. F. D. Lockman told of having his lickers-in develop into a poor condition through letting "the cat die" when cutting off the cards, saying that when the lickers-in slowed down upon stopping, the lickers-in became clogged with stock and formed slugs, which indicates that the speeds of the lickers-in have much to do with the quality of the work, especially if they are run too slow.

The next question was a discussion of progressive card settings—starting at the back with one setting and reducing these toward the front. Walter Danhoff, Chiquola Manufacturing Company, Honea Path, S. C., does not use the progressive settings, but sets all of his card flats to a 10/1000-inch. Mr. Padgett sets to a 12/1000-inch at the back flat setting and to a 10/1000-inch at the other three settings. He advised setting a bit closer than this if possible. J. T. Bray, Woodside Cotton Mills Company, Greenville, tries to set all flats to a 10/1000-inch gauge where possible, saying that much depends on the condition of the floor, chains, etc. He would prefer to set with a 7/1000-inch gauge for better carding, but has never been able to do this. N. G. Hardie, general superintendent, Chadwick-Hoskins Mills, Charlotte, N. C., agreed that there must be a good foundation for the cards if close settings are to be used.

The next discussion was on controlled draft drawing as compared with two-process drawing. J. T. Bray has never compared the two processes with each other, but is now using the controlled draft drawing and is perfectly satisfied with it. In fact the drawing has done so much good at his plant that he thinks it is one of the best things ever to come to the plant. The stock is evener, yard per yard than before. Also, on the controlled draft drawing there are no stops for piece-ups. Ray Swetenburg, Ware Shoals Manufacturing Company, had run a test on both the new controlled drawing and the new 4-roll drawing, both as to breaking strength and evenness, using 1 3/16-inch cotton, and there was not enough difference between the two processes to have a preference. However, both showed up between 30 and 40 per cent better than the old type of drawing.

Information was requested on a system of double sliver drawing where the regular drawing is run through two tubes and into two trumpets, three ends going into each trumpet. The system reduces the number of cans behind the drawing frames and also reduces the amount of draft necessary. None of the members present had any experience with the system, though there are known examples of its being run in a few mills. It is understood that the system is operating satisfactorily at the Harmony Grove Mills, Commerce, Ga., of which J. A. Asbelle is superintendent. The sliver is taken directly to the intermediate, and the slubber is eliminated.

Is there any way to eliminate top and bottom clearer waste from coming through on the roving? was the next question. Mr. Padgett's mill uses the 4-roll H & B long draft roving, having bottom clearers but is having no trouble with the waste coming through in the roving. He uses a relative humidity of 62 per cent and is operating satisfactorily. The shell roller is used in front and the solid roller in the back. Formerly sheep skin roll covers were used, but cork has replaced it and the result reported was an evener yarn and better breaking strength.

The next question was a discussion of the front, second, and back line of roll collars wearing on metallic drawing rolls faster than those on the third line. All of the men had noticed this fact but could not account for it. Several men have had experience with case hardening the collars and have found that they wear less when this is done.

Spinning

First on the list of spinning questions was a discussion of the cause of cockled yarn. W. W. Cobb, Norris Cotton Mills, Cateechee, and John Lockman both considered improper roll settings as the cause. Joe Cobb said that grooved rolls would also make cockled filling. Joe Lyons has changed the quality of the roll covering cloth, getting one that is more resilient, and has eliminated this trouble. W. W. Cobb has two types of long draft spinning and has found cockled yarn on one but not on the other. Joe Cobb reported an experience with one type of long draft spinning frame, saying that it was not cleaned and overhauled often enough, and dust collected under the aprons, allowing them to slip and form gaps in the yarn. Mr. Lyons has the apron type of long draft spinning cleaned every time the section man replaces a roll—that is, whenever he replaces a roll he cleans all the way back, which averages about once a year. Mr. Lockman advocates cleaning every 2,000 hours. Mr. Hammond told of having much of the cockled yarn eliminated when the machine builder placed a lighter press roll next to the front roll. Joe Cobb also brought out that the levers must be the correct length to give the necessary weight or the yarn will cockle; also, the levers must be kept level at all times.

Going into a discussion of spinning yarn lapping up in low relative humidity, Mr. Stutts contended that it is caused by static electricity, affecting the work most when there is little humidity. When asked the

proper relative humidity for long draft spinning, one man advised that it depends on the conditions within the individual mill. Years ago 45 or 48 per cent relative humidity was considered proper, and now some of the mills carry from 50 to 55 per cent and others go as high as 60 to 65 per cent. He explained that it is the proper distribution of the grains of moisture that gives the room the best humidification. He was of the opinion that more lapping up is had with composition rolls than with leather or cork covered rolls. Joe Cobb told of changing to long draft spinning and having high roll covering cost, but after changing to cork the cost was reduced. He also found that a good grade of calfskin is helpful on long draft spinning. John Lockman considered the greatest cause of lapping up as being a cold room. This was explained by one man who said that in cold rooms the rolls had bits of moisture on them.

Which type of rolls make more cockled yarn—calfskin or sheepskin? was the second spinning question. John Lockman said that sometimes there will be more cockled yarn from calfskin than from sheepskin. The calfskin will have grooves in it after a time because it is harder and does not have the same cushion. Mr. Stutts was of the opinion that cockled yarn is caused more by the twist in the roving and the lack of uniformity in the staple than by the type of leather used as roll covering.

Speeds on long draft spinning frames was the next topic. John Lockman runs a higher speed than is recommended by the manufacturer. Mr. Hardie said that if the system is operating correctly a good speed could be secured, but that if it is not operating right the speed will have to be held down. Mr. Lockman added that a better speed can be secured on good cotton of long staple than on poor short staple cotton. F. D. Lockman advised that on long draft spinning the breaking strength is from 10 to 15 per cent higher than on the regular draft spinning and it stands to reason that higher speeds could be used on the long draft frames. If the speed is increased the spinning will run but there will be more ends down at high speeds than at low speeds.

Next discussed were the experiences in changing from short bobbins to longer ones. A member said that this had been done at his plant and it was found to be a great advantage and no disadvantage. The spinners run just as many sides as before. Mr. Lyons reported doing this and is getting 30 per cent more yarn on the bobbins and is making a saving in cost of 15 per cent. He understood that some mills have experienced the bobbins riding high, but has never had this trouble himself. Smith Crow, Drayton Mills, Spartanburg, had changed from the 6½-inch to the 7½-inch bobbin without experiencing any trouble. However, the rail was changed to keep the same distance between the tip of the bobbin and the threadboard guide. Another man had made a change from 7⅜-inch bobbin to the 8-inch bobbin; in so doing he had the benefit of new long draft spinning frames at the same time and had increased the size of the ring, using a heavier traveler. He had secured good results. Still another member had changed to longer bobbins on 8s to 12s and is using a heavier traveler to compensate for the balloon.

A question was raised as to the different running qualities of rayon staple as manufactured by the various processes. Mr. Crow has run various kinds of spun rayon staple and had found no appreciable difference in the running of the work, but understood that there is some rayon on the market that runs better than other. It was brought out that when running spun rayon, the spinners run approximately the same number of sides on rayon as compared to cotton numbers of the same count.

John S. Lockman

W. W. Cobb

The old question of the number of ends down per 1000-spindle hours on 30s warp and 40s filling was brought up. It was generally agreed that on 30s warp and end breakage of from 28 to 30 ends down per 1000-spindle hours is considered good running spinning. On 40s filling it varied from 45 to 55 ends down per 1000-spindle hours. Of course, the grade and staple of the cotton, spindle speed, and local conditions should be considered in each case

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The Common Cold

You can do many common sense things that will help you avoid colds, influenza, grippe and the like:

1. Dress comfortably according to the weather; avoid sudden changes of temperature, such as going from a warm room into severe cold weather, unless you are suitably clothed.
2. Moderate temperatures, around 70 degrees, in your dwelling are best; provide also adequate water evaporation to replenish the moisture taken out of the air by heating.
3. Get plenty of sleep and rest.
4. Before eating wash the hands with soap and warm water; keep dirty hands off the face.
5. Eat moderately, including vegetables, salads, citrus fruits, eggs and milk; chew the food thoroughly.
6. Drink plenty of water, especially between meals.
7. Have at least one easy bowel movement every day; but do not use heavy cathartics.
8. Bathe frequently; avoid exposure to severe cold immediately after bathing.
9. Keep away from persons who are coughing and sneezing; avoid all crowds.
10. At the beginning of a cold increase your amount of sleep and rest; and add more milk and fruit juices to your diet.
11. If feverish, go to bed and call a doctor.

—*National Safety Council*

Falling Hazards

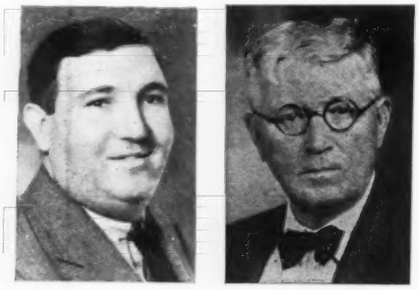
The best way to avoid falls is to form the habit of looking out for things that cause falls. Here are some to watch out for:

1. Grease, oil, or water on floors or steps.
2. Loose or fixed objects on floors or stairs.
3. Loose material that is apt to shift underfoot.
4. Uneven floors or floors in poor condition.
5. Worn or broken treads on stairs or steps.
6. Stairs with irregular or curving treads.
7. Ladders with defective rungs, rails or steps.
8. All makeshift supports, such as boxes, barrels, chairs, tables, etc.
9. Unguarded floor openings, and loose covers over floor openings.
10. Loose planks in scaffolds or platforms.
11. Icy or snow-covered pavements and walks.
12. Blind corners and dark places; walking without looking carefully ahead.
13. Shoes with turned-over heels or loose soles.
14. Heels catching in the cuffs of long trousers.
15. High heels and heels catching in the skirts or in long overcoats when descending stairs.
16. Leaning too far out of windows.
17. Failure to use safety belts and life lines when working in high places.

—*National Safety Council*

Spun Rayon is Topic of Interest at Danville Meeting

AN INTERESTING DISCUSSION on carding and spinning was held, along the lines of a prepared questionnaire, by the Northern North Carolina-Virginia Division of the Southern Textile Association, Saturday morning, April 23. at the country club, Danville, Va. This was the first time in several years that this division left the vicinity of Greensboro, N. C., to hold its meetings. Over 150 members were present, and were welcomed by L. J. Rushworth, Riverside and Dan River Cotton Mills, Inc. Dave Clark, Charlotte, N. C., made a short talk on the business prospects for the future. Edwin M. Holt, Erwin Cotton Mills Company, Cooleemee, N. C., president of the association, and one who has been so active in promoting the interests of the association, spoke on the progress of the association in the past year, and emphasized the value of such discussion meetings to the operating executive. W. J. Jennings, Minneola Manufacturing Company, Gibsonville N. C., chairman of the division, presided; the carding discussion was led by L. V. Andrews, Martinsville, Va., and the spinning was led by W. A. Hunt, Pickett Cotton Mills, Inc., High Point, N. C.



Left,
W. A. Hunt

Right,
W. J. Jennings

Carding

The first question was a discussion of the changes necessary when running cut staple rayon on cotton card room machinery, both in blends and as 100 per cent rayon. The chairman explained that this discussion is especially timely as more and more mills are going to cut staple. J. L. Brannan, Durham (N. C.) Cotton Manufacturing Company, who has had much experience on rayon, gave a number of pointers for running rayon, the substance of which are as follows: When using the old style pickers, close the grid bars up as close as possible because no cleaning is necessary, only the formation of the lap being required when running 100 per cent rayon, so that it can be carded into a sliver. On the card, remove as little strips as possible. Remove the mote knives under the card; set the screens as close as possible; and set the back and front plates close at the bottom and the top. Although some men change the calender roll gear, he has not found it necessary to do so. If the other regular processes of the carding department are used as on cotton, a good even sliver will be the result. The flats on the cards should be set as close as possible without touching the cylinder. The doffer speed should be about 5½ or 6 r.p.m. with the licker-in making 300 r.p.m. and the cylinder at the standard speed of 165 r.p.m. On the pickers it is necessary to run the fan at a speed of from 1000 to 1200 r.p.m. so that it will form an even lap. It is not good practice to run the fans too fast as they will curl the stock. Static electricity and improper tension often cause much trouble in the drawing process, and it has been found helpful to wrap gum sticking paper around the calender rolls at both the front and the back to remedy this; otherwise, the sliver will not readily go into the cans. As the sticking paper increases the size of the calender rolls, it is a simple procedure to correct for the tension by changing the tension gear. Grounding the frames has not helped in eliminating the static, but the foregoing methods will prove helpful. Blade beaters are harmful to the stock; Kirschner beaters prove more satisfactory, the speed being 1100 r.p.m. and set far away from feed roll. It is difficult to run rayon without split laps, but by building a creel in front of the picker and allowing several ends of roving to wrap about the lap as it is being formed, much lap splitting can be prevented.

When asked if weight should be taken off the calender head on pickers, he explained that this has not been done in his plant, but the idea sounded practical to him as the rayon packs tighter than cotton. The most practical method of blending rayon with cotton or other fibers is to use the old style picker and blend the laps on the apron; such as when running 25 per cent rayon and 75 per cent cotton, place three laps of cotton and one of rayon on the picker apron. Should the percentage be lower, it will be necessary to increase the length of the apron so that it will hold, for instance, five laps of cotton and one lap of rayon. If the laps are made slowly the blend will be satisfactory. If the blend is to be made on single-process pickers, the cotton or other fiber could be put in one vertical opener or hopper, and the rayon in the other. Mr. Holt brought out that the blend could be made at the sliver lap machine for the drawing by putting in the desired number of ends for the percentage of blend required. Mr. Brandon agreed with this method of blending, but pointed out that few mills have the lap machines and will be forced to blend by other means. When doing this, the stock may look streaked but this will disappear when it is processed on the roving frames.

B. W. Bingham, Pickett Cotton Mills, Inc., High Point, N. C., has run blended rayon, but did the blending at the drawing frames and secured good results. For 33⅓ per cent rayon blend with cotton, one end of rayon is put to the head on drawing for every two

Left,
L. V. Andrews

Right,
Edwin M. Holt

Reported by John C. Fonville.

ends of cotton, and a good yarn is the result.

T. C. Pegram, Erwin Cotton Mills Company, Cooleemee, N. C., brought up the question of using cans with springs in them to prevent the rayon from stretching. Mr. Brannan stated that he has used spring bottom cans but found no advantage in doing so. When queried by S. T. Anderson, Bedspread and Velour Mills, Marshall Field & Company, Leaksville, N. C., on putting the rayon waste to use, he was advised that the waste will make excellent ginghams. The group was advised that 1½ denier rayon is the most satisfactory to run, and if the denier gets as high as 3 or 4, trouble will be encountered.

L. J. Rushworth

B. W. Bingham

J. L. Brannan

Keeping Weights on Rayon

The second carding question also concerned rayon, and pertained to methods of keeping the weights through the mill. Mr. Bingham keeps his weights on rayon in the same manner that he does on cotton, that is, running the same weight of picker lap, as nearly as possible. and adjusting at the drawing frame. There will be little difficulty encountered with varying weights on rayon after the stock reaches the roving frames because the rayon does not retain the moisture as cotton does, and naturally will vary less than cotton in weight throughout the mill.

S. T. Anderson wanted to know whether some fluid or oil is used on the rayon to make it retain some moisture, and Mr. Brannan explained that glycerine mixed in the humidity water in the proportion of one quart of glycerine to five gallons of water will prove an excellent method of reducing the static electricity, usually caused by lack of moisture in the rayon. He also said that he maintains a relative humidity of 50 per cent in the card room, though it is sometimes necessary to spray the glycerine mixed with water under the card, advising that this is in no way injurious to the machine.

Next on the prepared questionnaire was a discussion of the best weight drawing sliver for long draft roving when making certain numbers of hank roving. Mr. Anderson is getting satisfactory results by using a 60-grain sliver to make 1.5 hank roving. This is on the long draft slubber, the roving going directly from the slubber to the spinning.

Evenness and Breaking Strength—Long Draft Roving

The breaking strength evenness, and number of ends down on long draft roving as compared to the conventional type was next discussed. R. C. Veach, Draper (N. C.) Plant, Marshall Field & Company, reported a six week test on a long draft roving frame (not the latest type), finding the breaking strength and evenness about the same, but also finding that the small gears collected lint and dust, and eventually released slubs into the yarn. The number of ends down were greater than on the conventional type. Mr. Pegram ran a long draft roving frame, spinning from 2.00 hank roving to make 30s yarn, the drawing being 57-grain sliver, and noted twice as many ends down as compared with the conventional type of roving processing. However, when he changed to 1.45 hank roving, with the same 57-grain sliver, the work improved. The latter test was on 21s yarn. Mr. Holt explained that there were nearly twice as many ends down when the bobbin was from one-half full to empty as when it was from full to one-half full, on 30s yarn.

The fifth question was the relation in 1/1000-inch between the hole in the calender roll trumpet and the coiler head trumpet on cards, and the proper distance from the trumpet to the bite of the roll on the coiler head. Mr. Hunt explained that there is a formula for figuring this, the diameter of the trumpet being proportional to the square root of the hank of sliver being run. Another man recommended using the specifications suggested by the machinery manufacturer. Mr. Bingham considered that a number of factors determine the size of the hole in the trumpet, such as the cotton being run, etc. The judgment of the carder will have to prevail, and his opinion as to the proper condensation of the sliver. Also, the distance from the trumpet to the bite of the rolls should be as close as possible or the sliver will pull thin. The latest machines make this distance much less than older machines. Another member said that the length of the staple must be taken into consideration. Culver Batson, Consolidated Textile Corporation, Lynchburg, Va., contended that the proper size of trumpet must be arrived at by experiment, and advised that there should be 1/64-inch difference in the size of the calender roll trumpet and the coiler head trumpet. Mr. Brannan thought 1/16-inch difference was correct. Mr. Andrews mentioned that this, and other valuable information, could be secured in bulletin form from Saco-Lowell Shops.

Front Roll Speed on Cork Rolls—Drawing

The sixth carding question was on the speed of drawing frame front rolls, and preventing the ends lapping up. Mr. Hunt has tested on speeds of from 175 to 313 r.p.m. for 1⅜-inch front rolls on drawing frames equipped with cork and finds that 240 r.p.m. is the best speed. He also advised that it is better to have small flutes instead of large flutes in the steel rolls. Mr. Brannan reduced his speed on the front rolls from 375 to 210 r.p.m. and reduced the number of lap-ups. He does not advocate high roll speeds on drawing. Mr. Bingham also reported better running conditions at 200 r.p.m. One man asked the advantage in changing from metallic rolls to cork, and he was told that much better work could be secured by so doing, the result being evener roving and better breaking strength. "The results will speak for themselves," he said.

The seventh question asked if production or draft were changed when long draft roving was installed in the plant. Messrs. Bingham, Anderson, and Brannan replied in the negative.

The last carding question was on re-working waste from roving, considering it from the standpoint of cutting waste off the bobbin or knocking it off. Some of the men thought it better to cut it off and others considered it better to knock it off. The general opinion was that there will be neps either way.

Spinning

W. A. Hunt took the floor and began the discussion on spinning. The first question was on a method of oiling rolls and wickless saddles, and the proper type of oil to use. Mr. Jennings uses a heavy oil and applies it by grinding off the spout of the can and oiling under the saddle. Mr. Brannan recommended a very heavy oil of the non-fluid type, and suggested also putting some oil in the top as well as under the saddle. On 80 hours he oils three times a week.

The second spinning question asked for a method of preventing fuzziness in long draft yarn. Mr. Bran-

(Continued on page 131)

Carding, Spinning, Cotton, and Safety Discussed at Gastonia Meeting

SPRING SECTIONAL MEETINGS of the Southern Textile Association got under way Friday night, April 15, beginning the practical discussions for the season, when the Gaston County Division met in the clubhouse of the A. M. Smyre Manufacturing Company, Ranlo, N. C. Marshall Dilling, secretary-superintendent of that company, led the discussions. A questionnaire had been prepared in advance and questions assigned so there could be preparation prior to the meeting. D. H. Williams, representative from Gastonia of the E. W. Montgomery Company, cotton brokers, was the guest speaker and he gave an interesting and enlightening talk. Mr. Williams also answered questions from the floor after his address.

Experience with the 1937 Cotton Crop

The first question was, *What are your experiences with and impressions of the 1937 cotton crop?* Mr. Dilling announced that he has had more difficulty with the 1937 crop than with any other crop since that of 1931. When H. G. Winget, superintendent,

MARSHALL DILLING, secretary-superintendent, A. M. Smyre Manufacturing Company, who led the discussions . . . . . .

Victory and Winget Mills, Gastonia, was called on to give his opinion, he stated that he wasn't accustomed to using language that it took to describe what he thought of the 1937 cotton. His breaking strength has dropped down and there seems to be more lint, fly, and fuzz in the 1937 crop of cotton, though his cleaning methods have not been changed, and he is doing just as much cleaning now as prior to the running of the 1937 cotton. There seems to be little difference in the amount of waste removed, according to Mr. Winget. Stuart H. Sherman, superintendent, Trenton Cotton Mills, Gastonia, also reported a drop in the breaking strength of from 5 to 10 per cent, but explained that this condition has been variable in that the yarn would break 90 pounds one day and 83 pounds the next, and then possibly go higher again, indicating that part of the cotton crop is good and some poor. As this variation is disconcerting when running a mill, Mr. Sherman suggests that the mixes of cotton be made as large as physically possible so that the cotton may be blended better and so that the variation in breaking strength may be compensated for by getting a better average. Discussing the cotton from the standpoint of fly, he is spraying the cotton with oil, and consequently notices no difference because the oil spray keeps the amount of fly lower. W. N. Williams, superintendent, Rex Spinning Company, Ranlo, N. C., has found the 1937 crop of cotton weaker than any since 1931. He has not noticed the great variation experienced by Mr. Sherman, but he has found that the waste increased some 1½ per cent more than the cotton crop of 1936; there is, he explained, more fly on the machinery than before. Mr. Dilling read a report from a leading textile laboratory, which had analyzed a sample of cloth with neps in it, and the report was that the neps proved to be immature cotton fibers and dead cotton fibers—the test being made on fabric containing 1937 cotton. From the report it seemed that much of the 1937 cotton fiber failed to mature, and when processed by the machinery, it is not eliminated, but curls and remains in the stock. These immature fibers are almost the same as neps, but more pronounced.

At this point D. H. Williams was introduced, and after entertaining the crowd with a few humorous stories, he spoke on phases of the cotton question especially interesting to the fine yarn group.

After his talk, Mr. Williams was questioned on various phases concerning the condition of cotton. He explained that often one section of the country is subjected to the same weather conditions and the cotton from that location is about the same. The brokers must determine which sections have suffered from unfavorable growing conditions and do their best to purchase cotton only from localities that had more favorable conditions during the growing season. A whole county might have poor cotton and then a few miles away the cotton crop will prove satisfactory. According to Mr. Williams, the soil has little to do with the poor running condition of the cotton, most of it being directly due to the weather. Mr. Williams also explained that when fertilizer is used it strengthens the cotton. According to him, it is the extreme change in weather that affects the cotton; if a sudden damp period comes on, then the sun bakes the soil, and then it is damp again, there is a detrimental effect on the cotton. Upon being questioned concerning the difference in the American and Egyptian cotton, Mr. Williams said that speaking from the standpoint of uniformity, length, and strength, the Egyptian cotton is handled on an entirely different basis; there are only two classifications of Egyptian cotton, long and short. Then too, the Egyptian cotton is blended thoroughly before it leaves the country, with many sections of the country being represented, and the cotton is usually of about the same grade continually.

More or Less Twist in Roving

The second question on the prepared questionnaire was, *What effect will more or less twist in roving have on the breaking strength of yarn?*, which was assigned to W. N. Williams. He said that after listening to the discussion on cotton, he had changed his mind about twist in roving. He considers the least possible amount of twist in the roving to get it on and off the bobbin as the correct amount to run, but contended that most mill men do not know just what this amount of twist is, or what twist multiple will give the correct twist. Usually when the roving gets to the intermediate and fine frames there is not enough twist and the roving breaks back, and when this occurs the mill man inserts more twist and thinks he has done the right thing, but when this is done the rolls begin to show the wear. "I think if we determine the right twist from the start, and keep the rolls closer, we will

Reported by John C. Fonville.

get along all right. And then when the work runs poorly, we should look for something else besides the twist in the roving. We can run high twist in the spinning, but we should run as low a twist multiple as possible in the roving."

Is it necessary to put more twist in spinning in hot weather? If so, why?, was the third question. S. M. Cauble, D. E. Rhyne Mills, Inc., Southside, N. C., said, "I use just as little twist as possible and I do not see that it is necessary to add twist in the summer. I never added twist in the summer as long as the spinning ran well." G. R. Grice, Lola Mills. Inc., Stanley, N. C., reported, "I have had to put twist in at times, but I think it was because of the cotton. I remember when I could get the cotton through the mill only by adding twist. Once we had some cotton that looked all right, but when we got it in the mill it went to pieces, and we had to add twist to get it through. If you have good cotton and the proper humidity, it is possible to go through the summer without adding twist. When I have added twist, it is due to some reason other than the weather. One time, when we had some irrigated cotton, which was brittle, we could not make it run without adding some twist." W. N. Williams explained that this procedure came about some years ago when there was not enough good cotton raised in one season to last the entire year, and the good cotton supply gave out about August or September, that is, all but the poor cotton, so when twist was added to make it run it was naturally conceded that the weather had much to do with the running of the work, when all the time it was due to the condition of the stock being processed. Mr. Dilling brought out that years ago the mills were not equipped with proper humidifying installations, and this may have had something to do with twist being added. Mr. Winget added, "We just got the habit and couldn't stop!"

Square and Round Point Travelers

Has a square point traveler any advantages over a round point traveler? If so, what are they?, was the next question. S. M. Cauble reported on this: "It all depends on the men that are going to run them. At our plant we run 80s to 120s, and one time I got some square point travelers, but would not even try to run them. Later, on some re-worked spinning rings, I could not get the round point travelers to run so I got some square point ones. They ran well and I have been using them for over two years on 36s and 40s. Sometime ago we tried square point travelers on 60s at 9600 r.p.m. and got good results. We ran a test under identical conditions for 33 hours, using 416 spindles on square point travelers and 416 spindles on round points, on 60s. We made end-down tests and found that we had 129 more ends down on round point travelers than on square points. We also ran an endurance test on them and found that the round point travelers lasted 400 hours and the square point travelers 480. That is, we run them that long before we knock them off, because we find that they have served their time in that many hours. The square point travelers are 10 per cent cheaper than the round points because they are easier to make." A. P. Richie asked if the square point travelers require more power, and Mr. Cauble said that he does not think so.

Next followed a discussion of the new light-weight tape as compared with the old style tape. J. P. Bivins contended that he has had difficulty in getting the correct testing conditions, though he has tried on both old and new frames—he has been unable to get the proper speed for testing on both kinds of tape. On some new frames he did find that the new light-weight tape gives a saving of about 10 per cent in power. His other tests were run under such conditions that they could not be taken as conclusive. He has also tried the heavy tape, sewed tape, and clipped tape. He will make other tests and probably report on them at the next meeting. He brought to light an interesting observation. In one of his mills there were four frames being driven by a 25 hp. motor, but the motor became hot and it was developing 29 hp. instead of 25 hp. or less. It was discovered that the motor was in good condition, but that the two-thirds of the tapes were drawn up so tightly that they were binding. When this condition was remedied the motor ran satisfactorily. At another mill he had cut off the clipper type of tape and put on sewed tapes, finding a saving of 7½ per cent in power by so doing.

C. K. Bryant contended that there is the human element involved in running the tests, and this must be taken into consideration. One man should sew all

H. GILMER WINGET, superintendent, Victory and Winget Mills, Gastonia, N. C. . . . . .

the tapes and make sure that all the conditions are as nearly alike as possible. One test that he ran with the light-weight tape and the old style tape showed that the horsepower developed dropped from 29.15 to 21.4, in favor of the light-weight tape. Also, the spindle speed went from 9,000 to 9,660 r.p.m. with the new light-weight tape. Mr. Dilling reported making a simple test over 16 hours, under the same conditions and on the same frame. There was a saving of 5.45 per cent in power by using the light-weight tape, but the spindle speed was not tested. He then gave the report of the test that has been sent to many of the mills, which in each instance gave a power saving in favor of the light-weight tape. Mr. Sherman told of making a test on the regular tape and the tape using a clipper, but found the results unfavorable with the clipper tape, both as to length of service and reduction in spindle speed. There seemed to be no difference in the amount of twist when the spindle speed was reduced, so it was assumed that the motor speed was reduced.

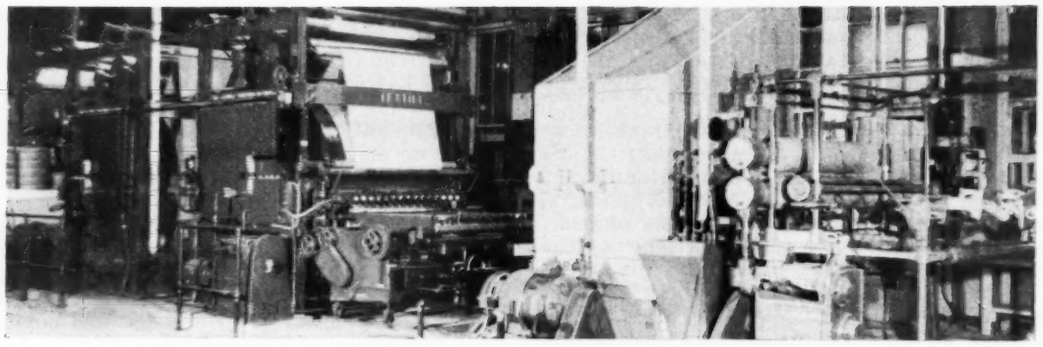
Mr. Long looked at the question from an entirely different viewpoint. He suggested that the present tapes being used in any mill should be adjusted correctly first, and told of having done so at his own plant, with a resulting saving of two horsepower. Some discussion followed on the method used in determining the spindle speed, and it was found that some of the men use stroboscopes and others use tachometers.

The next question was, *Why does some ply yarn have a saw-tooth appearance and feel?* Mr. Williams said that possibly it is because one thread is larger than the others. Mr. Dilling remarked that it could be caused by one spool being tighter than the others.

When asked why cockled yarn shows up more in 3-ply than in 2-ply, both being of the same count, Mr. Winget said it must be because there is one more thread to look after.

What is the best method of preventing soft or weak spots in yarn on twisters standing over the week-end or longer? was the eighth question. Mr. Winget explained that when the mill stands over the week-end, the water in the wet twisters makes a soft place in the yarn where it sticks to the water roll and to remedy this he had the water rolls lifted up, but this proved worse than ever because the rolls were not lifted evenly and the yarn kinked. He said that lately, since the recent recession, the twisters stand longer than over

(Continued on page 133)



Courtesy The Textile-Finishing Machinery Co.
Tandem Super-Sanforizer unit has auxiliary finishing unit

Making Shrinkage Chart for Piece Goods, by William T. Leggis

IT IS OFTEN necessary in textile processing work to have available handy shrinkage data for piece goods. By arranging the data in graph form, any shrinkage problem can be solved at a glance without resorting to voluminous columns of figures. The accompanying chart represents shrinkage values up to 25 per cent for piece goods in the greige from 50 to 60 yards. Shrinkage can be determined accurately to ¼ of one per cent shrinkage, yielding yardage values accurate to plus or minus ⅛ yard. The horizontal values represent percentage shrinkage, subdivided to ¼ of one per cent. The vertical values represent yardage with each small division representing ⅛ of a yard. The following examples illustrate how this chart is used:

Example 1: A piece of cloth is 50 yards long in the greige. Shrinkage during finishing is known to be 5 per cent. What will the finished yardage be? Answer: Follow the 50-yard diagonal to the 5 per cent shrinkage line. Follow out horizontally to the yardage scale. Finished yardage is therefore 47 and 4 (eighths) yards.

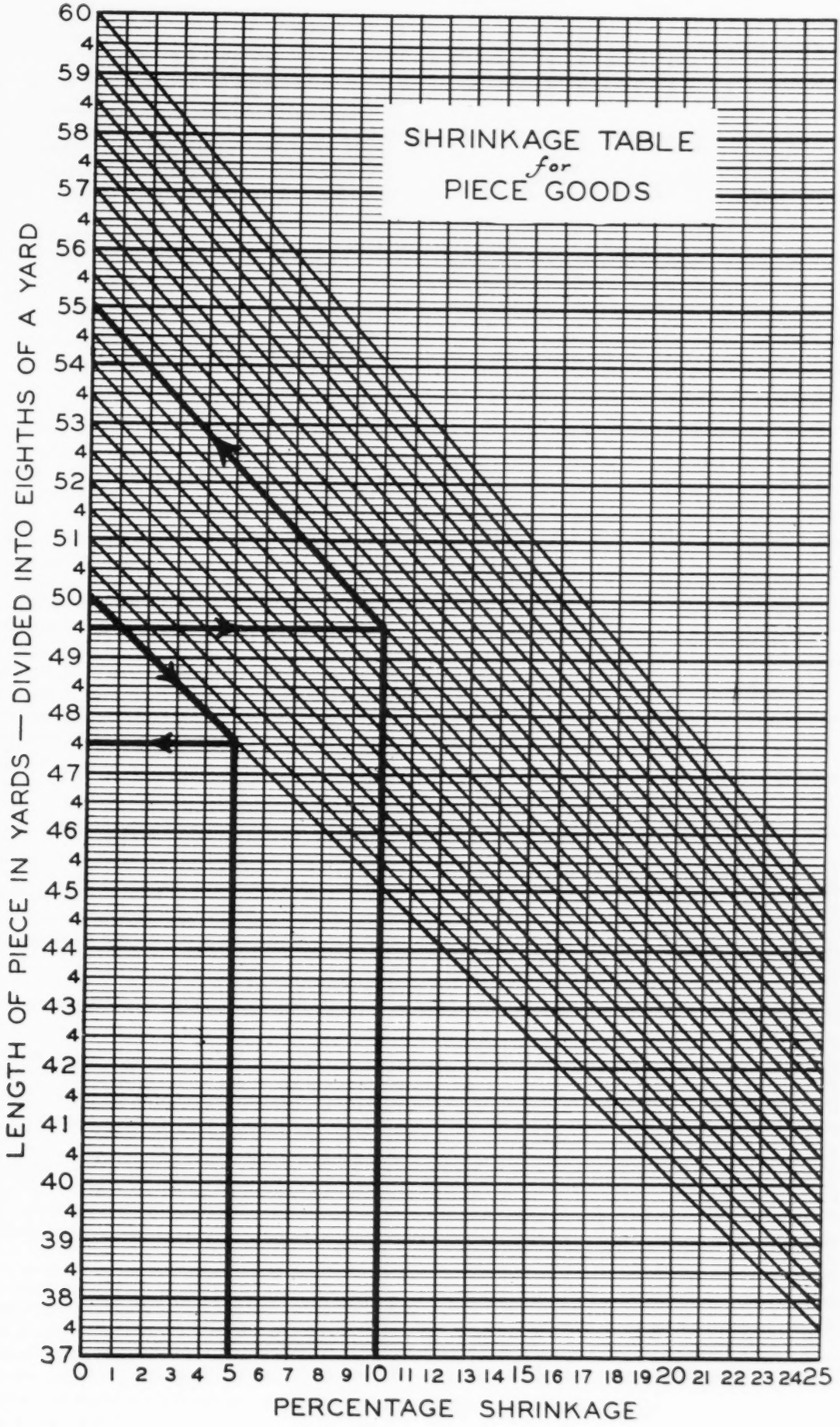
Example 2: The same type of problem can be worked backwards. Suppose a piece of cloth finished 49-4 yards. Shrinkage is known to be 10 per cent. What was the greige length? Answer: Follow the 49-4 horizontally till it intersects the 10 per cent shrinkage line. Then read up the diagonal line to 55 yards. Answer is therefore 55 yards in greige.

Example 3: Suppose a piece of cloth 55 yards in the greige finished 49-4 yards. What is the percentage shrinkage? Answer: Where the 5-yard diagonal intersects the 49-4 yard horizontal, read down to the shrinkage scale. In this case the answer is 10 per cent. Points which fall in between the diagonals can be estimated quite acurately to ⅛ of a yard, bearing in mind that the vertical distance between any two adjacent diagonal lines represents 4/8 of a yard.

For the convenience of those who wish to draw up their own charts in any range which is convenient for their work, the enclosed table of shrinkage data at 0 per cent shrinkage and at 25 per cent shrinkage for piece goods in the greige from 60 to 100 yards long, will prove very handy.

A chart for any range can be drawn up by following the general arrangement of the accompany graph. Subdivide the yardage scale into eighths of yard in the desired range. Shrinkage scale will be the same as in the chart. Let us assume that it is desired to make a chart for shrinkage values for pieces from 60 to 70 yards in the greige. The yardage scale would then read from 47 yards to 70 yards. From each point in the yardage scale draw a straight diagonal line to the yardage point along the 25 per cent shrinkage line. To take a concrete example: We wish to draw the line for 62 yards. Place a point at 62 yards on the left scale. From the accompanying table we find that at 25 per cent shrinkage the length is 46-4. Place a dot at 46-4. Draw a straight line between these two points. Similar lines can be drawn for all values between 60 and 70 yards and the desired graph is completed.

Length in Greige	Length 25% Shrinkage	Length in Greige	Length 25% Shrinkage
61	45-6	80-4	60-3
61-4	46-1	81	60-6
62	46-4	81-4	61-1
62-4	46-7	82	61-4
63	47-2	82-4	61-7
63-4	47-5	83	62-2
64	48-0	83-4	62-5
64-4	48-3	84	63-0
65	48-6	84-4	63-3
65-4	49-1	85	63-6
66	49-4	85-4	64-1
66-4	49-7	86	64-4
67	50-2	86-4	64-7
67-4	50-5	87	65-2
68	51-0	87-4	65-5
68-4	51-3	88	66-0
69	51-6	88-4	66-3
69-4	52-1	89	66-6
70	52-4	89-4	67-1
70-4	52-7	90	67-4
71	53-2	90-4	67-7
71-4	53-5	91	68-2
72	54-0	91-4	68-5
72-4	54-3	92	69-0
73	54-6	92-4	69-3
73-4	55-1	93	69-6
74	55-4	93-4	70-1
74-4	55-7	94	70-4
75	56-2	94-4	70-7
75-4	56-5	95	71-2
76	57-0	95-4	71-5
76-4	57-3	96	72-0
77	57-6	96-4	72-3
77-4	58-1	97	72-6
78	58-4	97-4	73-1
78-4	58-7	98	73-4
79	59-2	98-4	73-7
79-4	59-5	99	74-2
80	60-0	99-4	74-5
		100	75-0


SHRINKAGE TABLE
for
PIECE GOODS
LENGTH OF PIECE IN YARDS — DIVIDED INTO EIGHTHS OF A YARD
60 4 59 4 58 4 57 4 56 4 55 4 54 4 53 4 52 4 51 4 50 4 49 4 48 4 47 4 46 4 45 4 44 4 43 4 42 4 41 4 40 4 39 4 38 4 37
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25
PERCENTAGE SHRINKAGE

CURRENT TEXTILE TOPICS ....

Talk of the Month

COTTON MANUFACTURE, or practically every industry, has suffered so far this year from one of those economic quirks that makes each depression its own distinctive period. Fundamentals run more or less a traditional course, with broad upswings and alternate reactions called depressions. Then there are the intermediate recoveries and recessions, also following a well-known underlying pattern. But it is axiomatic that each depression brings a change of some sort in the pattern.

Evolution of mill control pushed along by adversity

To the extent that a new condition arises, industry faces an unprecedented situation. The situation in this year of 1938 has been a peculiar kind of uncertainty which left all private business bewildered. Recovery made a good start which was abruptly halted when the President a year ago in April issued warnings calculated to check inflation. But while the Administration took action at that time, it did nothing for the next year which business could accept as constructive.

In the ordinary course of depression and its aftermath, a temporary recovery such as that culminating last spring has been followed by a moderate recession of short duration and then a new forward surge. Cotton mill leaders last May were among the first industrialists to realize that the recovery had over-reached (that incidentally being a speculative boomlet in response to fears of inflation promoted by Administration price and wage policies) and even so early started retrenching on production.

If normal business factors had been allowed to work in the subsequent months, the policy of mills would have been hailed as constructive. It took the Administration until this spring to realize that deflation had again set in with disastrous results. So when curtailment by cotton mills through the winter was extended to what seemed drastic limits, even that did not suffice. Buying lagged and prices dropped.

Out of this extraordinary position, however, some permanent good may come. Adversity is a hard teacher, but a contributor to progress. Not only did the disappointing movement of goods early in the spring lead to short time and complete closing of some plants for the time being, but in the words of the New York *Journal of Commerce*, early in April, "it is taken for granted that the third shift will be gone and forgotten before the end of the month".

Up to April buyers were still pressing for concessions in prices, notwithstanding that the goods markets were below costs of production. And as usual they would not buy while any doubts remained that the bottom had not been reached. An indication of the extreme liquidation that occurred from April, 1937, to April, 1938, is conveyed in the highs last year, the recent lows and the bottom for the previous depression for certain standard gray cloths, as follows:

	1937	1938	Dep.
38½-inch 60x48s	6⅝	3¾	2½
38½-inch 64x60s	8	4⅜	2⅞
39-inch 68x72s	8⅞	4⅞	3¼
39-inch 80x80s	10¼	6	4
4-yd. sheetings	9	5	3⅛
Filling sateens	12½	7⅜	5⅛
Raw cotton N. Y.	15¼	8.44	5⅛

If that be proved by ultimate experience to be permanent, it will indeed be a fact that evolution of self-regulation in the cotton industry has been pushed along by adversity. When demand was small some years ago, we suggested in these columns that it was a good time to experiment with regulated production. A reasonable schedule of hours, both for the workers and the machinery, was proposed as a way for ascertaining with fair approximation the relationships of supply to demand.

Now, it is to be ardently hoped, the industry will gain some valuable information on how such operation works. Analysts have figured that capacity on a two-shift basis is closely in line with normal demand for the industry's output. Another severe lesson in over-production (albeit relative in an unbalanced market) has been given. All can profit in a reasonably regulated industry, because sellers will be on an equal footing with buyers in trading.

Early April found goods accumulating at mills, in spite of the low production. The stocks were not heavy, but a little was sufficient to keep buyers back, even though they had long been liquidating their accumulation of 1937 and needed to replenish. When they found that mills were ready to close, or reduce operations to a minimum, they realized that it meant a serious outlook for supplies and quickly took the surplus; also began bidding up the market for further replenishment.

From all appearances, at the time of writing, this marked a turning point for the industry. It practically coincided with the defeat of the reorganization bill and gained impetus from the general wave of relief because of that action. But the basic business situation still remained in a process of very slow development. The best that could be said was that foundations were being laid for a new recovery, with the outlook in favorable contrast with that a year ago.

COTTON MANUFACTURERS of this district have experienced a disappointing year, in which their own constructive policies were of no avail against a recrudescence of depression. The spring season was largely a failure and eyes have been turned in recent weeks to the goods for fall merchandise as the main hope. However, the end of March saw a more fa-

vorable spirit developing under the stimulus of various outside influences.

Up to the middle of April the movement of fine cotton goods had not got started in a broad way. The northern mills were continuing their strict policy of operating in relation to orders, although the market undercurrent was improved. The action of southern mills of the previous fortnight, in closing plants temporarily or reducing production to a minimum, was constructive on the whole market.

New England Mill Situation

New England mills at the same time were still reducing output in some cases, after having begun a retrenchment as early as last May. This branch of the industry had learned years before the inevitable repercussions from a speculative movement based upon fears of inflation. Prompt steps taken in the spring of 1937 to mitigate the reaction in the bud were ineffective only because the recession took an unprecedented aspect and overwhelmed the country by its severity.

With persistent and intensifying curtailment, the mills came through the protracted dull market period in relatively good statistical position. It appeared at the depth of the spring inactivity that stocks of combed goods were well liquidated. Prices had sunk, under pressure of the weak market for raw cotton and the subnormal demand for close to a year, but it was evident that mills were in a position to exact advances at the first sign of covering among buyers in response to replenishment needs.

Buyers early in April began to pay heed to the changing situation. While they were slow to bid the market up, a realization that prices were at bargain levels was indicated by proffers of business for July-August delivery at the low basis. Indeed, substantial contracts had been offered for some weeks previous on that basis. The business was not accepted for the reason that mills had had enough of unprofitable selling.

Wage reductions, which began at mid-winter as the salvation of certain mills and a means of partial relief for others, have had a further spread into the spring. The C. I. O. affiliate at Housatonic, Mass., is among the latest to vote a reduction. The mill management had expressed the hope that the union would vote a reduction to enable the plant to be continued. A reduction also has been effected at the J. & P. Coats, Inc., plant in Providence.

It long ago became manifest that the final advance of 1937, coming after the tide of inflation had run its course, was ill advised. "The wage reductions which are becoming more general," said Sidney Scheuer in a recent market letter, "are in the nature of corrective adjustments and are not of the same character as those experienced in the early 1930s.

"They will not, in our judgment, degenerate into any such spectacle. They are an unpleasant part of the industrial settling process necessary after an orgy of ill-considered business policies embarked upon during a period of extreme instability in administrative judgment."

Directors of the B. B. & R. Knight Corporation have effected reorganization as directed by stockholders, whereby this old enterprise has been changed to "The Fruit of the Loom, Inc." Thus passes from Rhode Island's textile industry a name which goes back to 1851, when Robert Knight founded the company. The new name, however, is derived from a famous trademarked product of the Knight interests.

Completion of orders by the Neild Manufacturing Company of New Bedford, operating under trusteeship, led to the closing of the plant in the spring. Plans were made for keeping the plant in good condition, however, in the belief that the officers would be able under 77B reorganization proceedings to secure additional capital for liquidation of pressing debts and to reopen.

The North Webster (Mass.) mills of the Slater Company, descendants of Samuel Slater, founder of the cotton textile industry in this country, have been sold to a shoe manufacturing corporation. Two other mills in sections of Webster had previously been sold by H. N. Slater, making all the property of the company there now the holding of other interests. Cotton manufacturing had been stopped two years ago.

At a meeting of stockholders of the Charlton Mills, an old unit of the industry in Fall River, it was voted to sell to the General Cotton Supply Corporation. Considerable objection to the proposal was raised, as a number feared that the mill would be junked and many workers deprived of employment. Few actual votes in opposition, however, were made.

"THE SITUATION"

As Seen Across an Executive's Desk

April 18, 1938

IT IS NEVER the policy of this executive to paint a gloomy picture, especially as things can change so completely in our industry within the space of a few weeks, but on the other hand, there is certainly no reason why I should present anything but a true picture of the state of things—and this month it is a blue-black summary that I give.

In every branch of the industry we have depression factors: extremely large stocks on hand; a great void in new orders; manufacturing margins at the most unfavorable point at any time since compiled records have been kept by associations. We have a resultant decline in production activities in every section of the industry. The spinning mills are running on approximately two or three days a week time. The print cloth mills one by one are closing down for individual and indefinite curtailment and there is strong rumor of a co-operative 30-day shutdown of the entire group due to excess stocks and no new business. Knit goods, finishing, and all other allied phases of the textile industry suffer accordingly.

Coupled with this is the difference in retail prices, which are still high, and mill prices, which

are approximately one-third lower than a year ago. This difference cannot be erased, but it can be explained, for the retail stores are still trying to dispose of stocks bought by wholesalers at high prices and thus we are paying in the neck for the damming up of the normal flow of business. There is nothing in the world which will raise mill prices except demand. Today we have no demand, consequently no backbone to our efforts to pry up prices. But, when a mill executive is desperately trying to stave off bankruptcy; desperately trying to keep his mill running just enough to feed his operatives, a sale at any price seems better than no sale. It is poor business but good humanitarianism. However, the business cogs turn on profits and not a soft heart.

The Silver Lining

In legislative divisions and promotion activities and in a definite planning program on the part of the overly redundant print cloth folks to eliminate future hazards we find some reason for the silver lining to our dark cloud.

The Senate Finance Committee, steered by Pat Harrison, did business a good turn when they overhauled the five billion dollar revenue bill and pushed it through the Senate without an audible "no" vote. The processing tax was shorn from the revised bill, and there is strong possibility that we will be troubled by that item no more this session. The capital gains tax was modified and the surplus profits tax was thrown out.

Despite the possibility of a veto on the part of the President, business was heartened by Senator Harrison's attitude when Pat stood pat on the elimination of those unfavorable features to the revenue bill.

In brief, the Senate voted to substitute a flat 18 per cent rate on corporation income for the House-approved undistributed profits tax. The House levy had applied to corporations with more than $25,000 net income and ranged from 16 to 20 per cent, depending upon the amount of profits distributed.

On the capital gains tax, the Senate approved a flat 15 per cent rate in place of a graduated scale of rates voted in the House. The House rates were lower on gains realized over shorter periods.

The bill goes to a joint conference committee which will seek to adjust the differences between the Senate and House measures. Business feels, however, that these particular two measures which did them so much damage, if removed, will react most favorably on general market conditions.

The new wage-hour bill was recommended by the House Labor Committee and provides for a graduated minimum wage starting at 25 cents an hour and increasing to 40 cents in three years. The bill is stripped of all wage differentials and provides for a gradual shortening of the work week from 44 hours to 40 hours over a two-year period. Sidney Hillman, fresh back from a long convalescence in Florida, is putting his drive behind an early passage of this measure.

In times like these it is good to have precautionary measures against wage cutting, but it seems rather silly to be hampering work time when mills are finding orders so few and far between. As a matter of fact, textile interests—in most cases—have maintained the 40-hour work week since the death of NRA, and although some cases of cutting wages below NRA standards have existed in certain groups of the industry others have refused to chisel. For example, a recent survey on the part of the southern combed yarn spinners showed that in that sector above-code rates still prevailed, and in only one instance had a combed yarn mill removed the 1936-37 increases. That one mill was described as an isolated country mill, with probably farm differentials. The statement from that association also said that no wage cuts were anticipated.

And, so while our profit margins are gone, our morale is still with us, for it was the very bad wage situation in 1932 which gave textiles a depression within a depression. Today, when mills are closed down or on curtailed time, if wages are kept up to par for working time, the operatives with benefit of unemployment compensation find their average weekly income almost up to normal—the baby normally well fed.

The hearings on the British trade treaty got under way the latter part of March and at them the textile interests displayed fortitude, preparedness and made a good fight against concessions in their product under the treaty now being considered with the United Kingdom. However, it was extremely evident that the hearings were simply the excuse to allow textile interests to blow off steam, for the Committee for Reciprocity Information had evidently been coached in free trade thinking until there was little room for another line of thought. If a bit of the "other side" was injected into their being it was probably on account of the appearance of one of the cotton-growing-states' Congressmen—a planter in his own right—who pleaded with the Committee not to reduce tariff barriers on cotton textiles as that would directly affect the cotton farmer, now already subsidized by the government. The domestic farmer, he pointed out, has lost his foreign markets for cotton and is solely dependent upon his domestic market for the disposal of his crop. This, no doubt, was a surprise package for the textile division of the Committee on Reciprocity Information to have a representative of the agriculturists plead on behalf of industry!

It seems almost inconceivable that with the mills facing shutdowns of an indeterminate period today due to lack of demand for their product, that the Government could lower tariff barriers and allow foreign cotton goods to flood the country, which would automatically close down the few open mills and keep closed those already standing idle.

However, Dr. Henry Grady, chairman of the Committee on Reciprocity Information, says: "Actual negotiations have not taken place as yet. It is hopeful that the treaty with the United Kingdom will have been written by June 1st."

He also pointed out that President McKinley, on the eve of his assassination, made a statement advocating the spirit of give-and-take in tariff matters, much as the Hull plan urges at this time.

It seems that instead of business getting a shot in the arm from such a theory—the late president got a shot into his coffin.

And, we glean a bit of Mr. Hull's astuteness from the National Whirligig which says that Mr. Hull was a politician long before he was a secretary—and that nothing will be done about this treaty until after fall elections.

And speaking of shots in the arm—President Roosevelt gave another of his famous fireside chats the other night, in which he outlined his new recovery program . . . only seven billion dollars' worth.

Following the chat—the raw cotton market reacted somewhat favorably, but it is thought that was due to the inflationary element contained in the desterilization of over one billion in gold which made available nearly two and a half billion for immediate government spending.

The textile element did not react happily to the talk, in economics or dispositions. A real slap—deserved only in spots—was handed to the industry by the President when he singled it out for criticism and said, "Through the winter and spring of 1937 cotton factories in hundreds of cases were running on a three-shift basis, piling up cotton goods in the factories and in the hands of middlemen and retailers. This meant that while the cotton factories speeded up to meet a particular type of abnormally stimulated demand, the buying power of the nation lagged behind."

It is certainly true that those portions of the industry which did not heed the third-shift menace talk of Max Gardner (Pinehurst—'36) are responsible for depression, to some extent, in their own industry, but other groups which have not had a third shift for years are hit equally as hard by the present national business slump. There is one thing wrong with the picture given at the fireside chat: the speculative buying trend on the part of customers who have since refused to furnish mills with shipping instructions was not mentioned. There is the evil. Such a contingency in future boom periods could be taken care of, at least in the spinning groups, if the Yarn Rules of 1937 are adopted by the carded and combed yarn groups. If it is not voluntarily taken care of, then the Federal Government might try to eliminate that very definite hazard.

The Yarn Rules

As to the Yarn Rules—at this writing, with the carded group lacking only 5 per cent of its adoption quota—news has been released that certain revisions are necessary to make the rules acceptable to all, and these will be taken under advisement by the revision committee immediately. The combed yarn group is as yet undecided whether to push ahead and adopt the rules without or with the carded group, or to await the revision results and put up a united front with the other group in the program.

However, it is inconceivable to me that a mill would hesitate to sign up on this program. The textile industry is the only industry which sells its goods on the option plan and it is an outmoded custom which has sapped the life blood of the industry. Mills would not have to close down due to filled warehouses if their customers were taking out goods purchased, or if their customers had to pay an interest charge on the money tied up in the warehoused goods. Neither would customers buy more than normal consumption would justify if they had to put their money into the raw material and labor costs, and on the other hand mills—if not believing in their customers' integrity would not overproduce.

So, in mentioning the third shift menace, which was forecast as disastrous and has proved to be so, we overlook the real cause of the third shift: the speculative buying on market gambles, with no margin of loss to the gambler. Speculation at the mills' expense must be eliminated before the third shift can be disposed of, for mill men are only human and they will be gullible enough to believe their "customers" when an order for vast yardage or poundage is placed, with or without benefit of either highballs or (later) specifications.

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"Upsetting the Applecart"

A committee of three men waited on their department head. They represented all the employees of the department in a request for a raise in wages. They told him that, if he did not have authority to grant the request, they would like his permission to take the matter up with the executive above.

He immediately objected to the whole idea, and told them that the company had no intention at that time of raising wages—that there was no sense to their bothering anybody higher up about it because they would get nowhere.

In handling the situation in this manner he felt that he was protecting his own prestige by giving them the answer himself. Furthermore, he thought he might make something of a hero of himself by "nipping a wage demand in the bud." His abrupt treatment, however, had the effect of making the men all the more determined. Three days later they had joined with other departments in the organization and made a flat demand upon the management, with a threat of a walkout if the request was not granted.

How do you think the foreman should have handled the situation when it came to his attention first?

—"How to Handle Grievances"; Elliott Service Co., Inc.

◆

Cooling Off

The worker was angry. In his excitement he charged his foreman with permitting a condition to exist which was very unfair.

Had the foreman come back with a hot retort, he could have made a bad situation much worse. But he controlled his own emotions. He permitted the worker to tell the whole story.

Then the foreman proceeded calmly and patiently to ask questions and discuss the matter quietly.

In a few minutes the worker's excitement subsided. Then the two had a sensible talk which ended in mutual understanding upon which a reasonable decision could be based.

Have you considered how important *the proper timing* of a decision may be?

—"How to Handle Grievances"; Elliott Service Co., Inc.

What the Southern Mills are Doing

According to reports, the Jackson Training School, state reform institution, located near Concord, N. C., now has ready for operation the modern and up-to-date model textile plant, sponsored by leading textile machinery and supply manufacturers, in which the boys will be trained in the textile trade. Cotton for processing will be grown at the school. Mill operation will be supervised by practical textile officials of the section.

Minneola Manufacturing Company, Gibsonville, N. C., has completed a modernization and revamping program requiring almost a year and costing about $75,000. All opening room equipment has been made automatic by the Saco-Lowell system. Vacuum card stripping has been installed. The dyeing department has been equipped with a Proctor & Schwartz drying machine.

A new blanket mill for making blankets of wool filling has been organized at Athens, Ga., with A. G. Dudley as president and O. D. Grimes as general manager. O. D. Grimes, Jr., is superintendent of the mill, which also manufactures other products.

At the Burlington (N. C.) Mills, 47 employees were awarded certificates for completing a course in first aid, conducted at the mill under the direction of W. L. Powell, of the North Carolina Industrial Commission, and in co-operation with the Alamance Red Cross chapter.

Tennessee Tufting Company has taken over the manufacture of chenille bedspreads, bath mats, and rugs, formerly made by the Ingram Manufacturing Company, Nashville, Tenn. The latter company will continue to specialize in yarns.

Crown Converting Company, Lincolnton, N. C., a new company, has installed dyeing and winding equipment to handle cotton yarn. The concern will buy yarn, dye it, and wind it on bobbins ready for the weaving mills.

Hanes Dye & Finishing Company, Winston-Salem, N. C., has completed construction of a new gray goods warehouse and an addition to the plant proper. The dyeing and bleaching departments have been enlarged.

It is reported that the Caraleigh Mill, Raleigh, N. C., which had been in operation for 40 years prior to 1930 when it suspended operations, will be re-opened under new ownership. The old machinery has been sold.

A bedspread manufacturing plant will be begun in Rome, Ga., in the No. 2 plant building of the Rome Hosiery Mills, according to reports. The company will install between 30 and 40 machines, it is said.

Virginia Manufacturing Company, Fork Shoals, S. C., is spending about $75,000 on a modernization program. The greater part of this amount is being used to purchase new machinery.

M. W. Cannon Company, Dalton, Ga., has opened a branch plant at Ringgold, Ga., to manufacture bedspreads. 20 machines are in operation and others will be installed later.

Wilson Finishing Mills, Burlington, N. C., are enlarging the present plant by an addition 70x110 feet, which will then give adequate room to take care of the increasing business.

A petition for charter has been filed by Kenner, Brockman & Schloss, Inc., Dalton, Ga., to manufacture, distribute, merchandise, wash, dye, finish, and convert goods.

Lenoir (N. C.) Cotton Mills, organized in 1901, has discontinued operations, disposed of its machinery, and the company will be liquidated.

A new bedspread plant has begun operations in Dalton, Ga., under the name of G. H. Rauschenberg, Inc. The company is using 100 machines.

Ross Fabrics, Inc., Morganton, N. C., have been granted a charter to manufacture tapestry and upholstery.

New Publications of Textile Interest . .

(These publications may be secured direct from the manufacturer or through COTTON.)

Black - Ray Lighting Company, 10415 St. Clair Ave., Cleveland, O. Folder on the quartz-arc which produces short-wave ultra-violet for fluorescence examination. Has many uses in textile industry for examining fabric and fibers for oils, stains, etc.

Allis-Chalmers Company, 1126 S. 70th St., Milwaukee, Wis. Bulletin describing new speed changer utilizing the principle of the vari-pitch sheave. Profusely illustrated.

Philadelphia Drying Machinery Company, 3351 Stokley St., Philadelphia, Pa. Folder on the new Hurricane master stock dryer recently made available.

General Electric Company, Schenectady, N. Y. *When You Can Measure,* a story of the company's measuring instruments. Well illustrated and contains pertinent facts on how things are done at the GE plant. Goes into voltage, resistance, time, and temperature.

Mathews Conveyer Company, Ellwood City, Pa. *Equipping Industry for Continuous Production.* A pictorial presentation of the entire line from the standpoint of the application of various types of conveyers in numerous industries. Handy book for the production manager.

Sanforized-Shrunk, 40 Worth St., New York City. *Facts about Shrinkage,* a pictorial folder on the Sanforizing process.

Whitin Machine Works, Whitinsville, Mass., a folder describing and illustrating the Knowlton & Newton Company's return air condenser, now manufactured by Whitin.

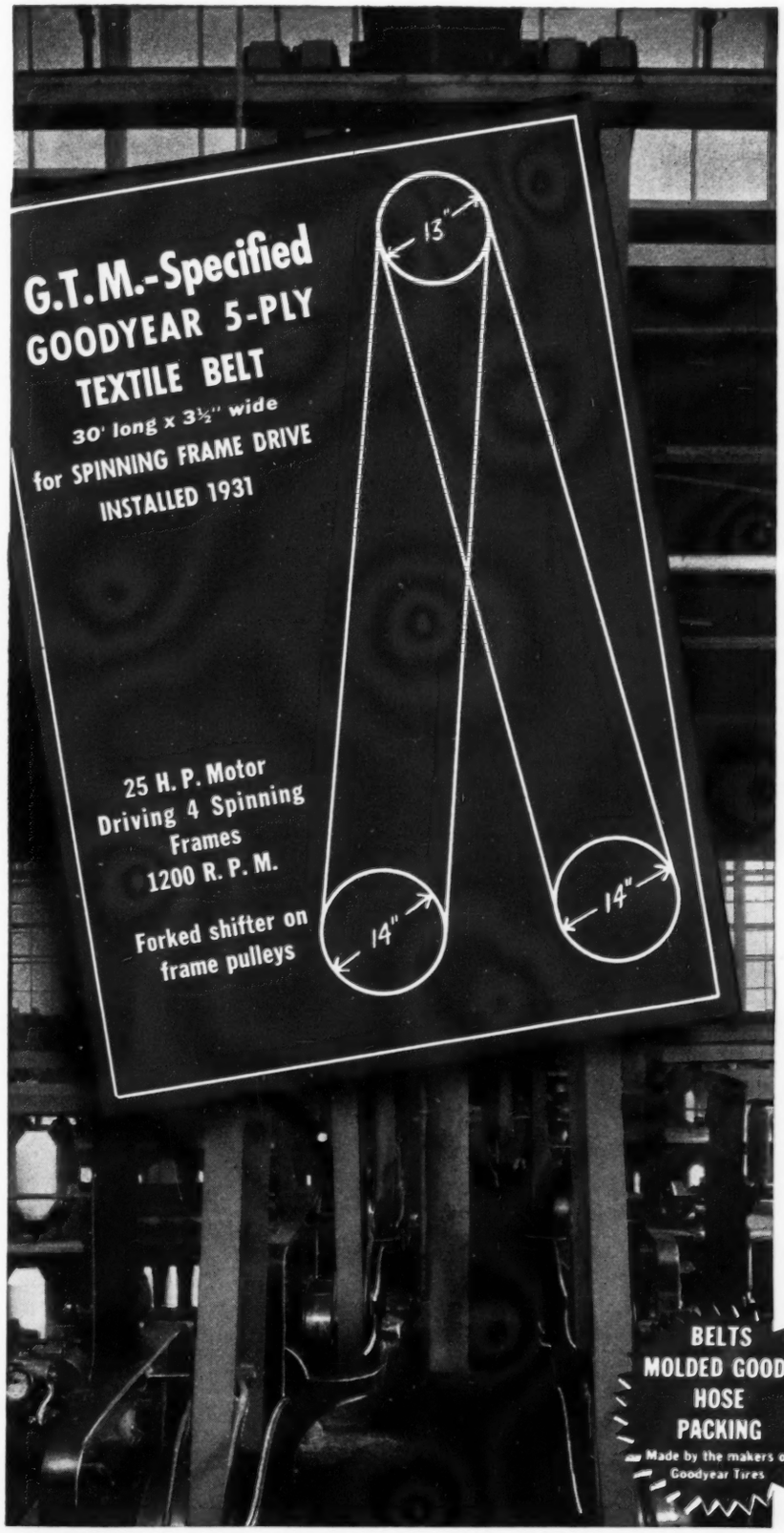
E. F. Houghton & Company, Philadelphia, Pa., *Science to the Eighth Decimal Place,* a reprint from the company's house organ, Research Illustrated; goes into transmission costs.

Haveg Corporation, Newark, Del. *Bulletin C-1,* on the company's standard towers and accessories, with dimensions and specifications.

The Manhattan Rubber Mfg. Division, Raybestos - Manhattan, Inc., Passaic, N. J. An instruction card on the proper care of hose. Designed to be hung in a conspicuous place. Gives valuable maintenance rules for unpacking, using, and storing hose.

The DeVilbiss Company, Toledo, O. *Catalog ID,* covering the company's complete line of industrial spray-painting and finishing equipment.

General Electric Company, Schenectady, N. Y. Several publications dealing with company's products. When ordering use publication number. GEA-1929A, low-speed drives that have been modernized at a saving with gear-motors; GEA-2742, pyranol capacitors for low-voltage industrial applications at 230, 460, and 575 volts; GEA- 841H, ac. magnetic switch, size one; GEA-432C (supercedes GEA-432B), direct current generators and exciters; GEA-1283A, cam-operated master switches on ac. or dc. control circuits only; GEA-2426A, outdoor oil-blast circuit breakers, type FLO-1; GEA-2823, high accuracy commercial testing instruments; GEA-2170A, directional distance relays; and GEA-2003B, oil circuit recloser.



The 7-YEAR BELT TEST —and the G.T.M.

THAT price is not always the true measure of belting quality is well illustrated by the experience of a large North Carolina textile mill. This mill had always used a medium grade of "double" belting on its spinning frame drives. It averaged 7 years' service with frequent repairs to take out stretch.

The mill superintendent was frankly skeptical when the G.T.M.—Goodyear Technical Man — advised him that Goodyear Textile Belting would duplicate this service at half the cost. "Show me," he said and in 1931 ten frames were fitted as a test with Goodyear 5-ply Textile Belts at a cost less than half as much as previous belts.

At this writing 7 years later all ten Goodyear belts are still on the job and all look good for at least another year's service. In all this time not a single belt has required repairs and the elimination of slip has increased production.

Better service at less than half the cost—that's the record of Goodyear Textile Belting in this 7-year test. The G.T.M. can do the same for you—to bring him to your mill just write Goodyear, Akron, Ohio, or Los Angeles, California —or the nearest Goodyear Mechanical Rubber Goods Distributor.

THE GREATEST NAME IN RUBBER

GOODYEAR

Bailey Meter Company, Cleveland, O. 32-page *Bulletin 46* containing an analysis of 7,000 combustion tests made during the last 12 years on all types and sizes of boilers, including a full range of fuels and methods of firing.

The Cleveland Oak Belting Company, 1239 West 9th St., Cleveland, O. Catalog of Cleve-Oak belting, which goes into some of the high spots in belting manufacture. Contains technical information handy to have at the fingertips.

Longer Lengths of Rayon Staple Being Used

According to reports, a number of mills are conducting tests and experiments on the use of somewhat longer lengths of staple fiber. Spinners have been achieving good results in the improvement of the strength and appearance of fabrics by using 2-inch staple in the 1.5 denier size. Inasmuch as the spinning frames and other machinery will accommodate staple this long, the mill men feel that it is to their advantage to process the longer fiber. The fact that mills are conscious of the potential use of rayon staple shows that the trend is definitely toward a greater rayon consumption.

Textile Technologists Meet

The American Association of Textile Technologists meeting was held at the Architectural League Club rooms, New York City, April 6, with 66 members and guests attending the dinner and lecture. The speaker of the evening was Constant Scholer. He spoke on the "Technique of Making Jacquard Fabrics", illustrating his remarks with line drawings.

Joint Council on Worth Street Rules

Through accredited representatives, nine market and mill organizations, which were co-sponsors of Worth Street Rules, endorsed the establishment of a Joint Council on Worth Street Rules, at a meeting held in April in the offices of The Association of Cotton Textile Merchants of New York.

The purpose of this new market mechanism will be the joint consideration and recommendation with respect to such revisions and additions to the Worth Street Rules as may be proposed by the individual organizations. It may also initiate pertinent studies and recommendations upon which there is general agreement.

To avoid the difficulties of an unwieldy personnel, the conference decided to recommend that each organization appoint a single member of the council, with an alternate and to defer permanent organization until the next meeting, to be held at an early date. Discussion centered on a proposal, made in behalf of The Association of Cotton Textile Merchants, of a revised Casualty Clause. It was recommended that the proposal be officially submitted to each organization under the title of Draft 12-A, to insure careful study of the altered provisions prior to the next meeting.

Variograph Pattern Producer

At the spring fair in Leipzig, Germany, the variograph pattern producer was exhibited by Dipl.-Ing B. A. Horvath, Dresden-N. 23, Germany. The variograph, which automatically produces decorative superficial patterns in an optical way, is said to solve on principle the problem of patterning. The main fields are the textile industry, paper, metal, and ceramic. The variograph produces patterns by projecting them on a screen; thus the designer can see the color effects and the figures, without having to resort to trial weaving and trial printing.

Textile Patents Granted

Harry Frohman, Charlotte, N. C., has been granted a patent on a pressure-operated switch which is adaptable for use in a portable grease gun manufactured by his company. The portable grease gun carries its own battery and motor, and the switch automatically stops the motor when a predetermined pressure has been built up by the grease pump, and starts it when pressure is needed.

Henry T. Davis, Rowan Cotton Mills, Salisbury, N. C., was granted a patent on a clearer board for drawing frames in which bristles are provided for contacting the top rolls and other longer bristles are provided for engaging the reduced portions of the top rolls adjacent their bearing portions also to remove lint from these reduced portions. E. L. Zachary, Central Falls, N. C., received a patent for a movable reed mechanism for looms.

Philadelphia Textile Manufacturers Form Research Bureau

The Philadelphia Textile Manufacturers Association has formed a research bureau, according to C. Marlin Bell, general manager of this group of 150 mills producing yarns, cloth, tape, and many textile garment items. The program will include enlargement of markets, development of new products, adjustment of transportation costs, adequate publicity for locally made goods, and enlistment of active cooperation of local and state authorities in the upbuilding of Philadelphia industries.

Dyers and Finishers Hold Meeting in Providence

The National Association of Dyers and Finishers held its regular meeting at the Narragansett Hotel in Providence, R. I., April 2. Leon Wheeler, president of the Association, presided at the meeting. William H. Cady, head chemist of the U. S. Finishing Company, and a past president of the American Association of Textile Chemists and Colorists, spoke on the history of dyes. W. E. Coughlin, research associate, Celanese Corporation, and the National Associated Institute of Dyers & Cleaners, gave a talk on the manner in which the goods are handled after it leaves the finishing plant and is handled by the consumers and cleaners. J. Andrew Clark, Sylvania Company, presented an interesting paper on permanent finishes.

Wall Chart on Shrinkage

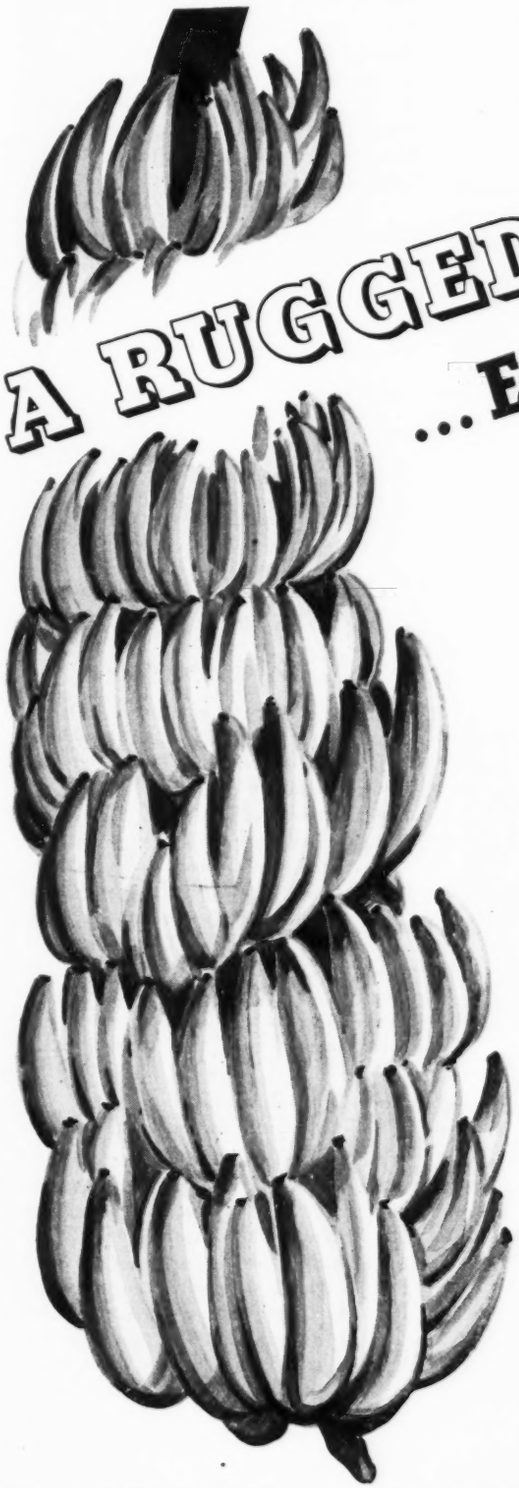
A wall chart visualizing the cause and control of shrinkage in cottons and linens together with a companion chart dramatizing the wide scope of sanforized-shrunk fabrics available today is a new service which Textiles Education Bureau, New York City, is making available to 5,000 consumer groups and home economics classes in high schools, colleges and universities.

These charts have been planned to meet the rising consumer interest for accurate information about merchandise. Supplemented with four-page pamphlets for group distribution, these charts are recommended as the basis for a class lesson or club program.

One chart presents the technical side of causes for shrinkage and the major steps in sanforizing to remove shrinkage. A series of diagrams show how the wavy cotton yarns are pulled straight during the bleaching, dyeing and other finishing processes. Then, under released tension and dampening, the yarns return to their wavy and therefore shortened form — causing shrinkage.

Photographs of three major steps in the sanforizing process show the original wash test on all fabrics to determine maximum shrinkage; the large sanforizing machine for shrinking the fabric; and the final measuring of shrunken fabric to check accuracy of shrinkage results.

Photographs showing in service, piece goods, home furnishings fabrics and all types of women's, men's and children's garments made out of sanforized-shrunk fabrics appear on the second chart. Actual swatches of typical fabrics are featured, with reproductions of tags and labels which assure the purchaser of the sanforized-shrunk characteristic.



A RUGGED INDIVIDUAL! ...Every one in the bunch

Nature never duplicates . . . Only in a fabricated product do you find true uniformity so essential in a roll covering material

WHETHER it's bananas or berries, pineapples or prunes, no two products of nature are ever truly *identical* twins. Almost alike, perhaps, but never *exactly* alike. You have to turn to modern manufacturing to find absolute uniformity.

This is an important point to remember when considering the purchase of material for covering your spinning rolls. Here absolute uniformity is more than desirable; it is vitally essential to good running work, to strong, uniform yarn, and to low roll covering costs.

Through every exacting step of manufacture, Armstrong's Cork Cots are scientifically controlled to assure you that each cot will be exactly like every other cot, uniform in density from end to end, and uniform throughout its entire wall thickness. Because of this two-fold uniformity characteristic, an Armstrong's Cork Cot can be precision-ground or buffed to a true and concentric finish—an important factor in spinning quality yarn. Another advantage is that after serving its normal life on the spinning roll, this cot can be rebuffed again and again, your guarantee of real economy in roll covering costs.

You pay not a single penny extra for the advantages of Armstrong's Cork Cots. First costs are no higher than for other roll covering materials. And to add to your operating savings, assembly costs are lower.

Now is the time to decide to enjoy the advantages of a change-over to Armstrong's Seamless Cork Cots . . . the fabricated roll covering that is always uniform. That Armstrong's Cork Cots will give you great economy and greater efficiency in your mill is no mere claim. It has been proved on more than 6,000,000 active spindles running on cork today. Let an Armstrong representative give you production figures of mills running your range of numbers. Or write today to Armstrong Cork Products Co., Textile Division, 923 Arch Street, Lancaster, Penna.

CORK PRODUCTS SINCE 1860

ARMSTRONG'S *Extra Cushion* SEAMLESS CORK COTS

NEW TEXTILE EQUIPMENT and MATERIALS

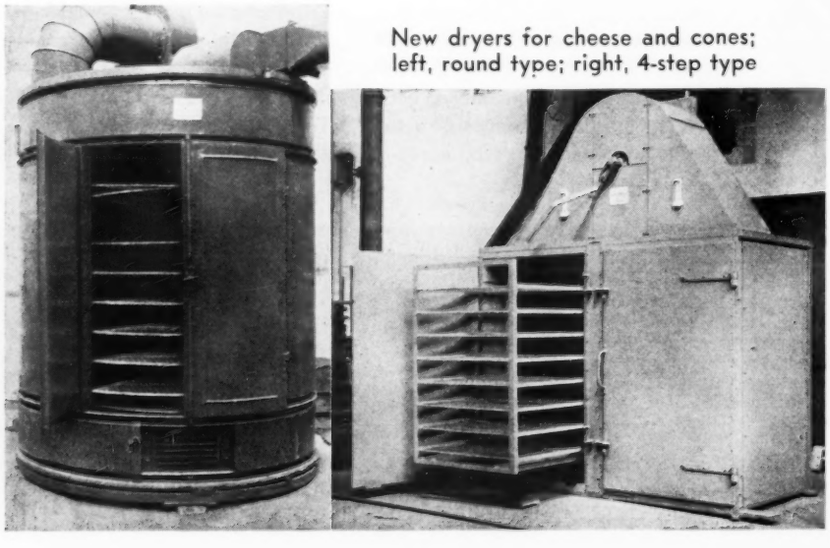
New Round and 4-Step Chamber Package Dryers

Hudson Industrial Company, 27 East 22nd St., New York City, have announced two new dryers for cheeses and cones, which operate on the counter-current principle, drying being done in four steps with alternating air currents.

The new round dryer comprises a vertical cylinder divided into five sections which rotates freely around a central shaft. Four of the sections form the four-step dryer, the fifth serves for loading and unloading. Each compartment is insulated, and unloading and reloading may be done without disturbing the drying process, which is completed after the goods have passed successively through all four sections; in each section the temperature and direction of the air is changed.

In the first of the four sections, the moist section, the yarn is subjected to the greatest heat; the air in this chamber is blown upward. The yarn moves next to the second section, under a downward current and lower temperature. In section three (half-dry) the air is blown upward; in section four (dry) the temperature is comparatively low, with the least amount of moisture; the air in this chamber is blown downward. The fifth and final turn brings the yarn to the loading and unloading chamber where the dried material is removed. As the cylinder is moved, taking the yarn progressively from one section to the next, an empty section is presented for loading a fresh charge.

The strong air current is produced by a powerful exhaust, and is heated by small steam-heaters, one at the entrance of each chamber. The hot air circulates within the machine and may be mixed with outside air at any ratio through a sluice-valve system regulated from the outside. The round dryer, in its four-step normal execution, is built for an output of about 90 pounds per hour, provided the cheeses have been hydro-extracted down to 50 per cent moisture prior to drying. Another model has outputs of approximately 135 and 212 pounds per hour.

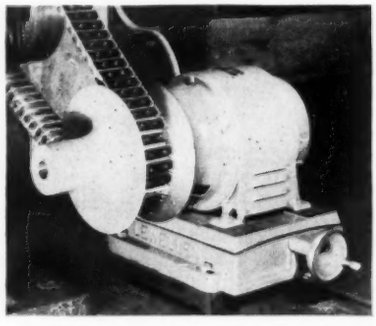


New dryers for cheese and cones; left, round type; right, 4-step type

◆

New Variable-Speed Motor

Lewellen Manufacturing Company, Columbus, Ind., makers of variable speed transmissions, have added to their line a new variable speed motor pulley which fits the shaft of a standard motor and drives directly to a pulley or sheave on the driven shaft. The motor and pulley mount upon an adjustable base, which permits infinite variation of speed of the driven shaft. The pulley is described as having high tensile castings, with all surfaces machined. A positive equalized disc travels in both directions, maintaining belt in the same position at all diameters. The bearings surfaces are pressure lubricated, with working parts completely enclosed.



Variable speed motor

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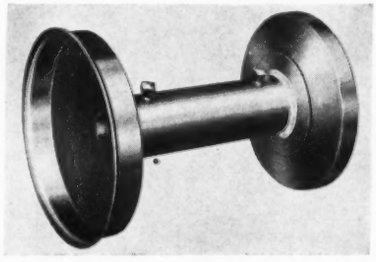
New Cylinder Head for Spinning Frames and Twisters

With the present-day trend toward longer spinning frames and twisters there has also been a change in the construction of the cylinder heads at the driving end. The thin head has been replaced on Saco-Lowell frames by the Model 38 dual head drive unit, now standard on all 8-inch, 9-inch, and 10-inch diameter cylinders. The head drive unit has been substantially strengthened. The reinforcement of the cylinder construction at this critical point has the effect of assuring a wider distribution of the stresses created by the torque. The heads are welded in place and are provided with 8 reinforcing webs.



Cylinder head

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Manhattan Develops New Insulation Blowing Hose

The Manhattan Rubber Manufacturing Division, of Raybestos-Manhattan, Inc., Passaic, N. J., has developed Condor insulation blowing hose. It is said to be light, flexible and easy to handle. A spring wire spiral is inserted in its body to prevent collapsing or kinking. It is available in 25 or 50 foot lengths in 2-inch, 2½-inch, and 3-inch sizes. Special couplings may be obtained which are so constructed that damage to windowsills is eliminated.

◆

New Coning Oil by Laurel

Laurel Soap Manufacturing Company, Inc., Philadelphia, Pa., has made available a new soluble rayon coning oil, Laurel Ruxite RO, said to be a superior rayon lubricator which prevents split filaments and breaks, gives greater pliability, emulsifies readily in water, washes out entirely in scouring process, and does not discolor on standing.

Would You Like Some More MONEY?

It takes more money to finance the sale of goods on terms, than it does to sell them for cash.

Through factoring you actually *sell for cash* without changing in any way your regular terms to your trade.

Through factoring the normal investment carried in accounts receivable becomes *additional cash working capital* which can be turned over more rapidly and more profitably than would be the case if this money were tied up in customers' accounts.

This is but one advantage that a factoring contract with Textile Banking Company provides.

Our representative will gladly call upon you at your convenience and explain fully how *your* business can be helped constructively through our service.

TEXTILE BANKING COMPANY

55 Madison Avenue, New York

Affiliated with Commercial Credit Company, Baltimore • Capital and Surplus Over $64,000,000

NEW ENGLAND REPRESENTATIVE: EDMUND H. LELAND, CHAMBER OF COMMERCE BUILDING, BOSTON, MASS.

SAVE ON SERVICE COSTS

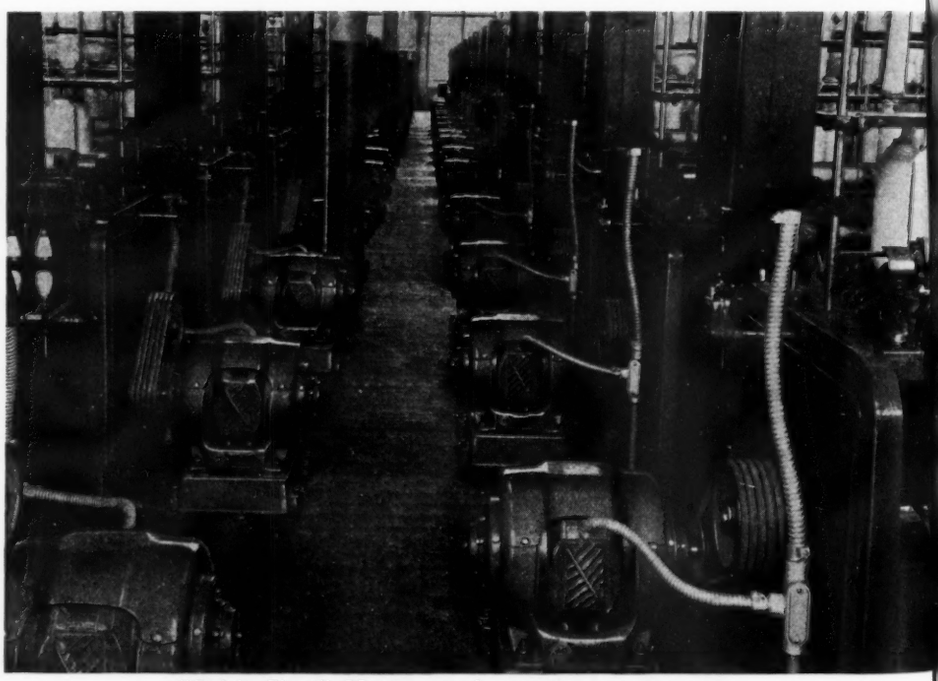
Allis-Chalmers Quick-Clean Motors Are Just What the Name Implies—Remember Also That They Belong to the Large Family of Allis-Chalmers "Lo-Maintenance" Motors

The best production equipment in the textile field will not make a cent of profit for you if it is powered by a motor that runs up service cost. Every shutdown reduces your mill efficiency. It will pay you to standardize on the Allis-Chalmers Quick-Clean "Lo-Maintenance" Motors. They are built to give years of continuous service.

Here's the reason. The whole Allis-Chalmers engineering and production organization has always been building equipment for heavy duty and severe service in a widely varied field of industries, requiring motors of sturdy design and construction, both electrical and mechanical. These values are passed on to you in the standard line of Allis-Chalmers motors and in motors designed for a special purpose, such as the Quick-Clean.

Here is one of the earlier installations of Quick-Clean Motors in a large southern cotton mill. Its operators are not faced with the trouble of shutdowns, loss of production, and expense of repair because their Quick-Clean Motors have glass smooth surfaces that give lint and dust no foothold — all working parts are positively dust sealed—with big unrestricted air passages so that lint and dust (which you can't keep out) pass right through.

Mill owners in textile centers have found that these motors well deserve their name "Quick-Clean." Specify Allis-Chalmers "Quick-Clean" when you order motors and save on service costs.



"Quick Clean" Motors—as far as the eye can see. This mill has found that Allis-Chalmers "Lo-Maintenance" Motors save money by cutting service costs.

ELECTRICAL DIVISION

ALLIS-CHALMERS

MILWAUKEE · WISCONSIN

898

Full-Bobbin Stop Motion for Filling Frames

Saco-Lowell Shops, Boston, Mass., has designed a full-bobbin stop motion to meet a demand created by the new conditions resulting in the spinning room following the advent of longer traverses and larger creel bobbins. According to the manufacturer, its use assures the production of full bobbins at all times, the same length of yarn on the bobbins at every doff, and relieves the doffers and spinners from the burden of stopping the frames at the completion of the set. Looking at the illustrations, a small cross shaft (Fig. 1), supported by bearings at any convenient samson, carries the latch *D*, which is always pressed downward by a flat steel spring. The cross shaft carries at one end a poker rod *C*, retained in position by setscrews. The long shipper rod *G* running the length of the frame carries a small but powerful coil spring F, which when the frame is running, bears against the adjustable sliding collar *E*, whose motion is regulated by the position of an ordinary round thrust collar. On the traverse motion rod used to connect the upright arms of the builder assembly, there is an adjustable block *B*, which when the frame is just ready to doff, will contact the poker rod *C*. The position of block *B* is adjustable; its position on the traverse rod, in relation to the running position of the poker rod, will determine the length of the ringrail traverse, and thus directly, the traverse of the yarn on the bobbin. When the frame is started, after doffing, the first movement of the shipper rod will cause the latch *D* to become hooked over the sliding collar *E*. The builder chain is now at its maximum effective length, and the ringrail at the bottom of the traverse, and the traverse rod in its extreme position. As the builder chain is wound on the drum, the ringrail rises, and the block *B* thus gradually approaches the poker rod *C*. Finally, the block *B* will move the poker rod *C* sufficiently to raise the latch *D*. When this occurs, the powerful compression spring will then move the shipper rod in the direction of the arrow; this movement of the shipper rod will stop the frame, either by shifting the belt to the loose pulley, or by opening the switch controlling the motor. The shipper rod is free to move within the coils of the spring, and the bore of the sliding collar. Therefore, stopping the frame between doffs is without effect on the full-bobbin stop motion. The position of the parts, when the frame has been stopped between doffs, is illustrated in Fig. 2.

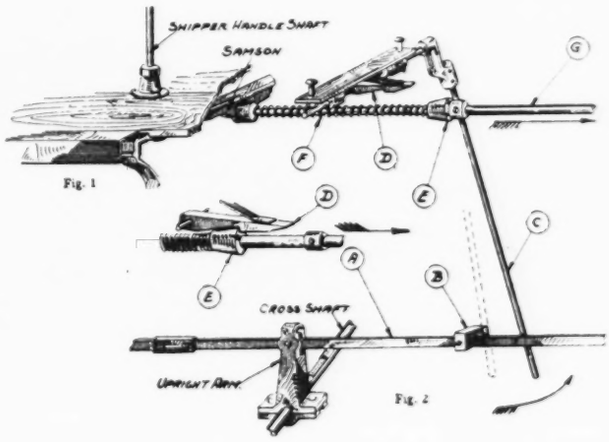


Fig. 1 Fig. 2

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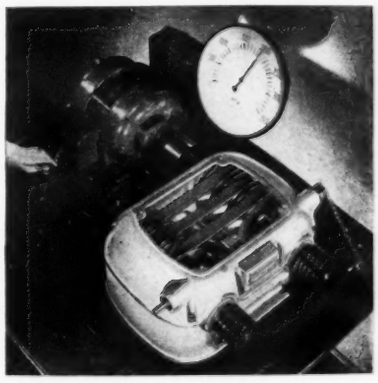
New Vari-Pitch Speed Changer

The Texrope Division, Allis-Chalmers Manufacturing Company, Milwaukee, Wis., has made available a new speed changer unit which utilizes the principle of the company's multi-groove vari-pitch sheaves. It consists of a ruggedly constructed compact type of unit applicable to all manner of industry. The totally enclosed unit, designed with double shaft extensions and driven from a standard motor, provides the flexibility that makes it adaptable to a wide variety of layouts to suit the individual application. Where the change in speed is to be adjusted manually only, the unit is provided with a readily accessible handwheel control. However, the unit can be equipped for electric remote control. Manual remote control is also possible. The present range of capacities now being offered include ratings up to 33 hp. with ratios as high as 3¾ to 1. It is expected that larger ratings will be developed in the future. The changer is especially applicable where material handling equipment must be controlled.

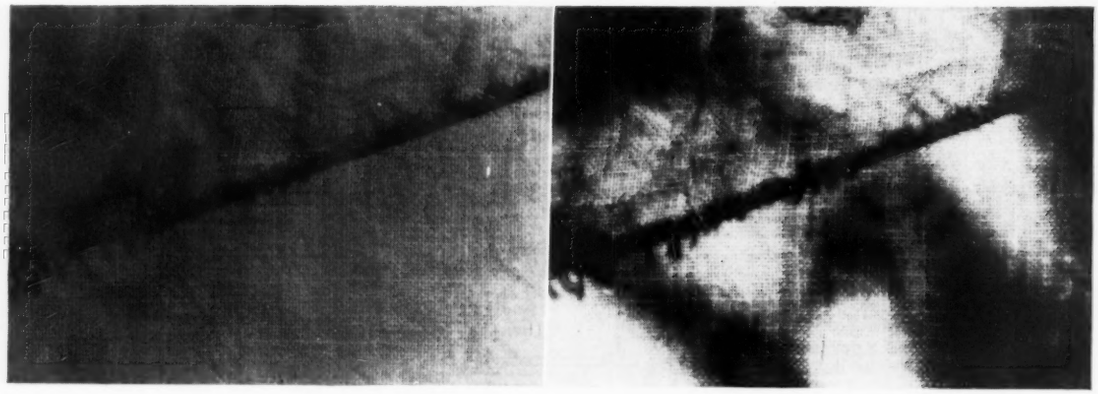

Speed changer

◆

Multi-Seal Pipe Connector

Multi-Seal Manufacturing Corporation, 123 N. Jefferson St., Chicago, Ill., has announced the multi-seal front drive pipe connector, which attaches any pipe or fitting to tanks, drums, boilers, or pipes from the outside and eliminates all work on the inside. By its use it eliminates the necessity to shut down the plant for draining and flushing tanks. It is installed quite simply by inserting the connector in the hole, and holding the body with a wrench, tightening the action nut. This connection may be used on steam, gas, oil, water and air, and will withstand high pressures, according to the company. In the connector, the compression cylinder, located between the head of the pipe and the connector shank, moves up on the shank taper, expanding and compressing to the inner surface of the job as the smaller, or action nut, is tightened. The compression cylinder takes the convex curvature of the inside surface. The pipe end has a standard taper thread.

Pipe connector



The two illustrations above are pictures of the same piece of cloth. Left, the cloth viewed under ordinary light. Right, oil spots made visible by the Black-Ray quartz arc.

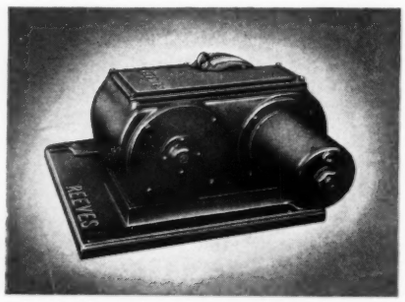
Black-Ray Quartz-Arc

Black-Ray Lighting Company, St. Clair-105th St. Building, 10415 St. Clair Ave., Cleveland, O., has placed on the market the Black-Ray quartz-arc, which is a lamp giving off the ultra-violet light for fluorescence inspection, comparison, and analysis. The quartz-arc produces the entire range of ultra-violet including the extremely low, as well as the middle and near range. It causes fluorescence in a wide variety of substances which do not fluoresce under other lamps. The quartz-arc is complete and ready to plug into 110 ac. circuits; it consists of mercury quartz burner, transformer, black-quartz lens, toggle switch, demonstration outfit, and all accessories to enable one to hook up and use the unit in a few minutes time. In the textile industry it may be used to detect the presence of mineral and fatty oils, waxes, albumins, etc.; mechanical damage by light, ironing, chemical treatment, oil and metal spots, etc.; mildew on wool, water spots produced in dyeing, mixed colors, etc.; hidden flaws, stains, impurities, chemicals in minute quantities; inequalities in dyeings which are seen by daylight, spots of all types which interfere with bleaching, dyeing, etc.; differentiates origin of fibers, apparently identical tints, and makes possible the tracing of the effect of washing or light exposure on dyed textiles. According to the manufacturer, it will do many other things too numerous to list.

◆

Remote Control on Vari-Speed Motodrive

Reeves Pulley Company, Columbus, Ind., has developed a new type of automatic and remote control for use with the company's vari-speed motodrive. The new control, known as fluid pressure control, is available for all units of the motodrive, and can be used to regulate automatically the speed from pressure variation, as in stoker feed on a boiler, maintenance of constant fluid pressure in a pipe line, or tank upon which there is variable demand, uniform tension between machine sections, or between a machine and rewinder. It may also be used as a manual remote control or as a semi-automatic control in different ways. The complete control consists of a bellows shifting mechanism mounted on the motodrive, an adjustable pressure



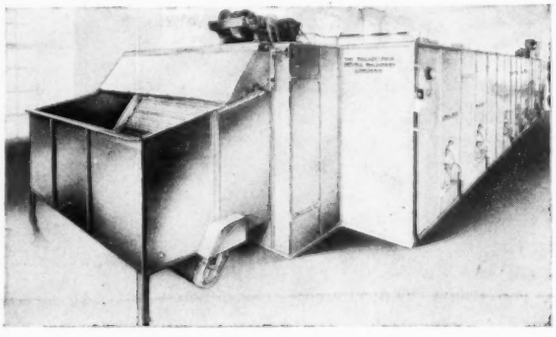
Vari-speed motodrive

reducing valve located where desired, auxiliary valves if needed, and connecting pipes. Fluid pressure is transmitted by means of oil, water, steam, gas, or air by a valve through piping to the bellows shifting mechanism which operates to increase or decrease speed on the motodrive, and hence on the driven machine. Speed of shifting depends on the kind of fluid used.

◆

Hurricane Master Stock Dryer

The Philadelphia Drying Machinery Company, 3351 Stokley St., Philadelphia, Pa., has developed the new "Hurricane" master stock dryer that is said to offer many advantages for the economical drying of all kinds of stock, and at the same time preserve the high quality of the materials being dried. The dryer is balanced to the individual requirements of the mill to utilize steam of low or high pressures. Quite frequently, it is said, process steam at low pressure can be used, thereby effecting operating economies of considerable magnitude. The new dryers are equipped with modern heating units, air re-circulation, improved conveying aprons, and flexibility of control. The fans used are a development of the company's engineering department; they are mounted on the extended shafts of standard electric motors, and are of the axial flow type with radially tapered blades. The fans are particularly suited for high-speed operation from direct-connected motors. The motors are mounted in special insulated pockets recessed in the dryer housing so that they do not protrude and take up extra floor space. Practically all insulated panels are removable and quick access may be had to all vital parts in the interior by means of large insulated doors on both sides. The dryer is available in various sizes.



Right, stock dryer . .

◆

New Dissolver

The Patterson Foundry & Machine Company, East Liverpool, Ohio, has announced a new addition to its line of dissolvers. This new dissolver is built in undergeared type to be used where low headroom makes necessary the lowest possible overall height of the machine. While this new machine is used in the rayon industry for dissolving xanthate, it is also adapted to the dissolving of cellulose of all types, as well as for the dissolving of many other products.

THE CLOTH TELLS THE STORY

If the cloth you make is even and free from bunches and slugs, it is proof enough that your mill is being run correctly.

If the opposite is true, then take warning that one or more wrong decisions have been made in your system of manufacture.

One of the most apparent reasons for bad cloth is the spinning of yarn on leather substitutes. A badly rutted and scored spinning roll covered with these materials will continue to spin bad yarn for weeks without being detected.

To avoid this cause of bad yarn, cover your rolls with "Gilleather," which has consistently passed the 12 POINT TEST for more than 100 years. It will spin good yarn, and nothing but good yarn, until it is worn out, when it won't spin at all.

There are many mills who have dropped substitutes to go back to truly dependable "Gilleather." They have discovered that success in spinning is measured in the quality of the cloth and the better price it brings, not in seeing how long the top rolls can be made to last.

Look at your cloth!

THE 12 POINT TEST

1. Does it automatically stop spinning when it makes bad yarn?
2. Does it retain its cushion and resiliency in low temperatures, as over the week-end in winter, and as long as it will draft?
3. Does it resist flattening or fluting over the week-end?
4. Does it require a standard diameter arbor, thus eliminating costly changes?
5. Is it impervious to excessive humidity?
6. Does it produce a minimum of eyebrows?
7. Does it eliminate lap-ups as long as it will make good yarn?
8. Does it eliminate cockled yarn, other factors being correct?
9. Does it produce yarn of maximum strength for a given staple, other factors being correct?
10. Does it require a minimum of attention?
11. Does it function properly ALL the time until worn out?
12. Has time proved it any better than the 600 odd "improved" roller coverings that have come and gone?

SHEEP and CALF SKIN
GILLEATHER *for* TOP ROLLS
SALEM, MASS.

Southern Representatives:

Gastonia, N. C., W. G. Hamner.
Greenville, S. C., Ralph Gossett.
Griffin, Ga., Belton C. Plowden.
Greenville, S. C., W. J. Moore
Dallas, Texas, Russell A. Singleton.

Adjustable binder . . . . . .

Adjustable Binder

The Silk City Metals Coating Company, Inc., 62 Ryle Ave., Paterson, N. J., has developed an adjustable binder that is constructed in two parts, the outside malleable iron binder, and the inside adjustable steel binder. The binder is said always to stay in the same shape and position, as the inside binders are adjusted only, thereby eliminating unnecessary adqustments of the protectors. The inside binders can be adjusted readily for wider or narrower shuttles. These binders are simple to adjust. According to the company the banging off of looms caused by the old style binders is eliminated because the spring of the binder takes care of the slight variations in the size of the shuttles caused by changes of temperature or moisture in the air. The pick on the looms can be reduced at least 50 per cent, it is said, thereby prolonging the life of pickers and picker sticks.

◆

New Dyestuff

E. I. DuPont de Nemours & Company, Inc., Dyestuffs Division, Wilmington, Del., has announced a new dyestuff which is said to show only a slight change under artificial light. It is known as Ponsol Brown 2G Paste, and produces yellow shades of brown. It may be used alone or in combination for dress goods, shirtings, curtains, and similar materials because of its yellowish shade and its fastness properties. It has demonstrated a practical immunity to the majority of ordinary destructive agencies, and good dyeing characteristics, being suitable to cotton and rayon in all forms.

◆

Light-Duty Overhead Trolley

Mathews Conveyer Company, Ellwood City, Pa., has developed a light-duty all-purpose anti-friction trolley suitable for use with the endless chain power operated type trolley conveyers, or as individual trolleys manually operated. The outer shell of the trolley is made of ⅛-inch thick steel, case hardened; the ball bearing incorporates a patented seal composed of a steel and felt labyrinth. The bearings are self contained and are furnished grease-packed or without lubrication. Conveyers of this type are made to convey unit loads overhead at the ceiling, descending to working heights at predetermined points. Capacity of this new trolley is 150 pounds, suitable for handling numerous commodities through processing and manufacture.

Oil-Proof Transmission Belt Perfected

The Manhattan Rubber Manufacturing Division, of Raybestos-Manhattan, Inc., Passaic, N. J., has announced that after a long period of research and experimentation, the Paranite-G.O.P. (gas and oil-proof) belt has been perfected. There is no natural rubber in these belts, the friction compounds being of a recently perfected G.O.P. synthetic material, which may be used and compounded as rubber is. Oil accumulating on the belts is said not to cause swelling or deterioration. These belts are made in regular transmission belt sizes.

◆

Double Friction Device for Slashers

Saco-Lowell Shops, Boston, Mass., in order to alleviate the strain on slasher frictions when heavier beams are made, has developed a special multiple disc friction. It is geared to wind the yarn onto the beam at any desired time after the beam has reached 18-inches or more in diameter. The beam is first started with the standard friction, then, when desired, the handwheel is turned in the opposite direction, bringing the second friction into gear and automatically disengaging the first. The frictions cannot become locked as tightening one releases the pressure on the other. With this second friction, the beam is geared to run at one-half its original speed. All the bearings are anti-friction, easily accessible. The new friction can be applied to any Saco-Lowell slasher, except the new high-speed machine.

◆

New Products by Houghton

E. F. Houghton & Company, Philadelphia, Pa., has announced two new oils used in silk soaking, and a powder which combines alkaline salts and mildew preventives, also used in silk soaking formulas. Silklubric No. 60 is a balanced blend of sulphonated animal and vegetable oils to which has been added a non-oxidizing white mineral oil and a wetting-out agent. It is used for soaking prior to direct knitting. It is said to offer more surface lubrication, faster wetting out, more uniformly conditioned tram, and cleaner running silk. Silklubric C differs from No. 60 in that it does not contain any mineral oil. Silklubric soaking powder is a unit product containing the proper proportions of alkaline salt and mildew preventive. Its use makes it necessary to use only two ingredients in the soaking bath—the oil and the powder.

Book on Cotton Mill Lubrication

Socony-Vacuum Oil Company, Inc., 26 Broadway, New York City, have prepared and made available an excellent book dealing with "Cotton Mill Lubrication". It contains 54 pages, and provides for the lubricating engineer and mill man a carefully-prepared and complete description of all of the machines used in cotton manufacturing, with descriptions of the various processes, including clear and accurate sketches. It discusses in detail the lubrication problems of each part of every machine, describing the requirements of each bearing, its type, etc. It treats the general and specific lubrication problems of each machine, and gives recommendations based on extensive experience as to the type and kind of lubricant, in each case.

◆

New Water Repellent

E. I. DuPont de Nemours & Company, Inc., Wilmington, Del., has developed a new type of water repellent designed for use on materials in which both repellency and body are desired. It is known as Aridex HW, and is a special wax-aluminum salt emulsion with a high solids content. It is particularly recommended by the manufacturer for use on heavy cotton goods to give greater weight and a firm hand, and it is also expected to be useful on all types of cotton, linen, rayon, and acetate fabrics.

◆

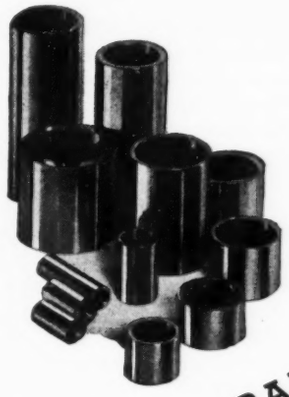
Copper Size Kettles

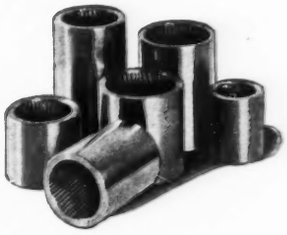
Saco-Lowell Shops, Boston, Mass., now has available the Model 38 all-copper size tank with special assemblies for cooking and storage of size. The material of construction now used is an extra heavy strong copper. The cooking kettle is provided with single stirrers of new and improved design. The action of the single stirrer is supplemented by a trio of baffle plates. Storage kettles similar to the cooking kettles are also available, and heating is produced by a copper coil at the bottom of the tank. Both cooking and storage kettles are available in sizes ranging from 158 gallons to 390 gallons.

◆

High Speed Tacking Machine Head

Birch Brothers, Inc., Somerville, Mass., have introduced a new high speed tacking machine head, designed to run at 25 yards per minute and making a stitch ¾-inch long. The head remains stationary, thereby eliminating vibration and wear. In conection with this head, the company has also developed a doubler, a table mounting for the head, and a folder, thus making a complete tacking machine range.





General Purpose Bearings

Over 700 individual bearing sizes . . . machine finished—ready for assembly . . . the alloy S.A.E. 64—Copper 80; Tin 10; Lead 10—ideal for over 90% of all general purpose bearing applications.

Graphited Bearings

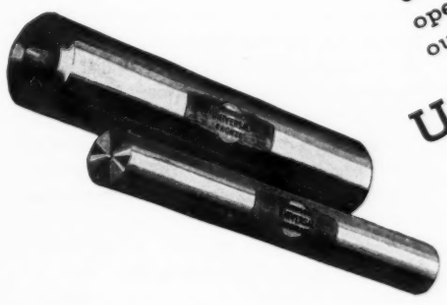
40 to 45% direct graphite contact with shaft . . . graphite held permanent in grooves CUT into bearing surface at 7 degrees lead . . . not soluble in oil, gasoline or water.

Electric Motor Bearings

Over 200 sizes—for practically any type motor . . . correct in alloy, design and tolerances . . . ideal for operating conditions such as high speeds, continuous overloads, misalignment of shafts.

Universal Bronze Bars

Completely machined—inside diameter, outside diameter, ends 25% savings in weight . . . 220 sizes cored and solid . . . the alloy S.A.E. 64—for over 60 years the choice of Engineers and Maintenance men.



WRITE FOR BULLETIN 370

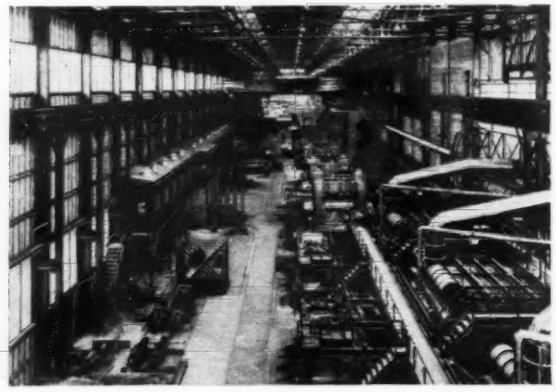
Sold through Industrial Supply Distributors

BETTER PERFORMANCE
MINIMIZED SPOILAGE
LOWER MAINTENANCE COSTS

INVESTIGATE NEW APPLICATIONS OF BRONZE IN TEXTILE MACHINERY

JOHNSON BRONZE COMPANY
530 SOUTH MILL STREET • NEW CASTLE, PA.
Sleeve BEARING HEADQUARTERS

TIMELY NEWS ITEMS WITH A TEXTILE SLANT . . . .



Inside the hot mill building at Republic's new 98-inch continuous strip mill in Cleveland

New Strip Mill Opened by Republic Steel Corp.

Republic Steel Corp., Cleveland, Ohio, recently opened in Cleveland a huge new 98-inch strip mill, which is described as the largest, fastest and most modern wide continuous strip mill in the world. The company explains that the new mill embodies every technological improvement developed in the art of processing steel, to make possible the production of extra wide sheet steel at terrific speeds. The latest advanced factory, management practices and technique in the efficient handling of materials, in the metallurgical control of products being processed, in the co-ordinating of all mill operations, and in the establishment of safe, healthful working conditions, are utilized.

Maximum delivery speed of the hot mill is 2,121 feet per minute. It can roll all finished widths from 30 to 94 inches and all finished thicknesses from 18 gauge strip to half-inch plate. The plant has a nominal rated capacity of 70,000 gross tons per month.

The location of every machine and item of equipment was scientifically worked out to provide efficiency. Particular attention was paid to the fast-growing trend throughout the steel industry of making "tailor-made" products to meet particular requirements and specifications. Despite the fact that the mill is geared to high-speed production of nearly a million tons per year, it is pointed out, it is designed to turn out smoothly and efficiently relatively small orders of specially processed steel.

◆◆◆

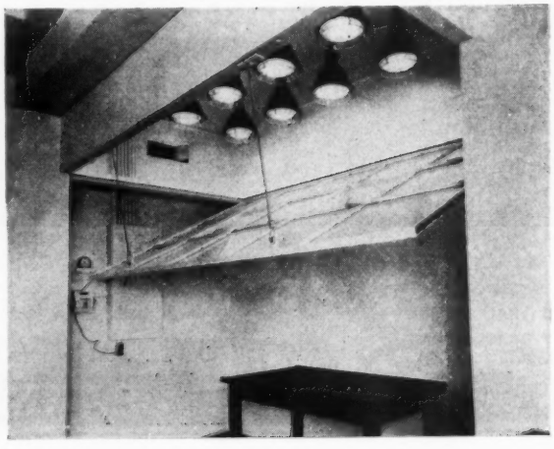
"Made Daylight" Provided in New Cotton Laboratory Room

A new daylight room has been installed in the Division of Cotton Marketing, Bureau of Agricultural Economics, Department of Agriculture, Washington, where Miss Dorothy Nickerson conducts her work with color grading of cotton and other agricultural commodities.

The "artificial daylight" is produced by providing the room with 15 large lamps (capacity 500-1000-1500 watt), each covered with a specially designed Corning Daylite filter that converts the light of the tungsten lamps to daylight. These are set behind a glass diffusing screen, made in the form of an overhead skylight. With 500 watt lamps in place, the illumination at table height is 60 foot-candles. Heat from the lamps is carried away by ventilation behind the glass panels; the air is changed five times a minute, and there is no appreciable heat in the working area.

The light produced closely matches in color that which has been internationally adopted as a standard for "average daylight". While this is not an entirely new development—cotton having been first classed satisfactorily under these lamps with daylight filters in 1918—it is only recently that the application has been worked out with the skylight eliminating the previous psychological objection of grading directly under a lamp. In setting up the requirements for the new grading room, data on illumination in all of the cotton classing rooms in which there is a government skylight were gathered and the minimum requirements set from this information.

Macbeth Daylighting Co., Inc., 227 West 17th St., New York, designed and installed the lighting for this grading room. A special type of paint, designed by the New Jersey Zinc Co., with a high reflectance in the visible and almost complete absorption in the infra-red, was used; the diffusing glass is Pittsburgh Plate Crystalex, sandblased and herculited.



The new "made daylight" grading room, with the diffusing glass lowered, showing part of the lamps with filters

◆

O'Shea District Manager for Buffalo Forge Co.

J. J. O'Shea has been appointed southeastern district manager for Buffalo Forge Company and Buffalo Pumps, Inc., Buffalo, N. Y. He will continue the offices of this company in the First National Bank Building, Atlanta, Ga., and will handle the complete lines of these two companies. Mr. O'Shea is thoroughly familiar with the application of the fans, blowers, pumps, and other products of these companies, having been connected with the engineering department of the companies, and also having been district manager for them in the Middle West, with offices in Indianapolis, Ind. He is a graduate of the Worcester Polytechnic Institute, and has been with the company since 1935.

◆

Morse Chain Appointments

Morse Chain Company, Detroit, Mich., a subsidiary of Borg-Warner Corp., has announced new appointments. Harold J. Skidmore, formerly assistant superintendent, has been appointed factory manager and superintendent, succeeding C. B. Mitchell, re-

signed. L. D. Worden has been added as assistant sales manager, in charge of industrial products manufactured in the Detroit plant, and will work under the direction of the Morse Chain Company's general sales office in Ithaca, N. Y.

◆

Link-Belt Atlanta Plant is Enlarged

Link-Belt Company, Atlanta plant, located at 1116 Murphy Ave., S. W., has been substantially enlarged in order to provide for a larger engineering department, more shipping space, and additional area for stocks of elevating, conveying, and power transmitting

Present Link-Belt plant

machinery equipment. In the main, this latest improvement consists of a 20x288-foot extension to the north side of the building. The construction throughout consists of structural steel framing with steel sash and corrugated metal covering.

◆

U S Bobbin Elects Officers

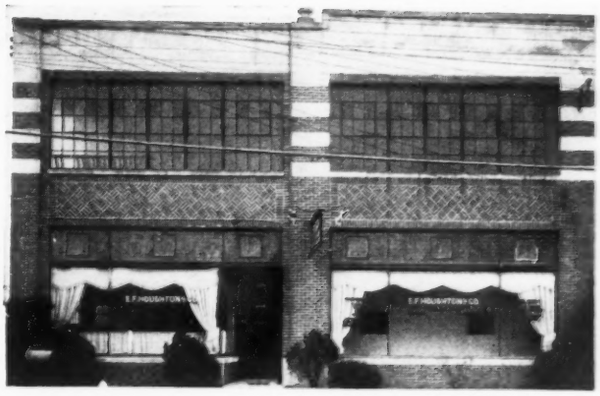
At the March meeting of the board of directors of the U S Bobbin & Shuttle Company, Providence, R. I., Edmund C. Mayo was elected chairman of the board; Thomas A. Francis was elected president and treasurer; Charles H. Jordan was elected vice-president; William J. McGeough was made general manager and assistant treasurer; and Wesley G. Carlson was made secretary.

◆

Cyanamid Acquires Amalgamated and John Campbell & Company

The Calco Chemical Company, Inc., Bound Brook, N. J., has announced that on March 31, 1938, the American Cyanamid Company acquired the assets of Amalgamated Dyestuff & Chemical Works, Inc., of Newark, N. J., a manufacturer of aniline colors and coal-tar products, and that the plant formerly operated by Amalgamated Dyestuff has been turned over by American Cyanamid Company to Calco to be operated as one of its manufacturing divisions. Calco is a wholly owned subsidiary of American Cyanamid Company. At the same time when the assets of Amalgamated Dyestuff were acquired by the American Cyanamid Company, the latter also acquired the assets and business of John Campbell & Company, of New York. The business heretofore carried on by John Campbell & Co. in the sale of dyestuffs and related products will hereafter be continued at the same location by a newly formed company under the name of "John Campbell & Company, Inc."

New Charlotte office and warehouse of Houghton . .



◆

Hugh Puckett Made Southern Sales Manager for Cyanamid

Hugh Puckett has been appointed southern sales manager of the American Cyanamid & Chemical Corporation, 30 Rockefeller Plaza, New York City, with headquarters at the Charlotte (N. C.) office of the company's southern district. Mr. Puckett has been assistant southern sales manager for the company.

Mr. Puckett

Mr. Puckett became associated with the American Cyanamid & Chemical Corporation upon the acquisition by that concern of the business of Chas. H. Stone, Inc., early in 1937. Prior to his association with Chas. H. Stone, Inc., Mr. Puckett had been connected with the National Aniline & Chemical Co. and the General Dyestuff Corp.

◆

Distributor for Schieren

R. W. Beveridge, of the Beveridge ReNeedling Company, Gastonia, N. C., has been appointed distributor for the state of North Carolina by Chas. A. Schieren Company, 30 Ferry St., New York City, makers of leather belting. Mr. Beveridge, who operates a belting repair shop, will carry a complete stock of this company's belting in Gastonia.

Houghton Opens Warehouse in Charlotte

E. F. Houghton & Company, Philadelphia, Pa., manufacturers of textile oils, lubricants, and mechanical leathers and belting, has recently opened a new warehouse and office at 1301-5 W. Morehead St., Charlotte, N. C. According to the company, the warehouse will be used as a central distribution point for the southern states. Other warehouses for the company are in Chattanooga, Greensboro, and Houston. The Charlotte warehouse and office are under the direction of W. H. Brinkley, southern divisional sales manager.

◆

Report on Fuel Engineering Meet

Appalachian Coals, Inc., have just issued a complete report of the Proceedings of the Twenty-second Fuel Engineering Conference which was held recently in Atlanta, Georgia. A number of textile engineers and master mechanics attended this meeting and mills who are interested may obtain copies of the reports from Appalachian Coals, Inc., Transportation Building, Cincinnati, Ohio.

Talks which are included in these reports include "Fuels of Today and Tomorrow", "The Nation's Power Supply; Its Economic Development Under Private Enterprise"; "Selection of Pulverized Coal Equipment", "The Multiple Underfeed Stoker; Its Modernization and Application of Water Cooling", "The Spreader Stoker", as well as the discussions following each talk.

◆

Moth-Proofing Process

William E. Wilson, research director of the Allied Textiles Research Society, has developed a new process for the preservation and moth-proofing of fabrics. The process is known as the A-T-R Conditioning Process, and is said to increase the tensile strength of fibers, regardless of the condition of the fabric. The Manhattan Storage & Warehouse Company has the exclusive franchise on the process.

Obituary

A. F. McKissick, 68, long an executive of the Alice Manufacturing Company, Easley, S. C., and for more than a third of a century a leader in the textile industry of South Carolina, passed away April 8. Mr. McKissick built the Arial Mills, near Easley, in 1928.

William M. Heywood, president, Heywood Narrow Fabric Company, passed away at Cocoa, Fla., where he was spending the winter. He had been in ill health for several years.

Samuel Henry Pearson, 71, retired superintendent of the American Spinning Company, Greenville, S. C., passed away at his home in St. Petersburg, Fla., early in April.

Frank Gifford Tallman, 78, vice-president of the E. I. DuPont de Nemours & Company, Inc., and who was retired in 1925 after 20 years of service, passed away in Wilmington, Del., recently.

W. R. Odell, 83, president of the Kerr Bleaching and Finishing Works, Concord, N. C., passed away suddenly March 25. He had been in the textile business for over 60 years. He organized one of the first cotton mills in North Carolina. He also organized the mill at Nashville, Tenn., which is now the Werthan Bag Company.

John L. Wilcox, Janesville, Wis., president of the Lewis Knitting Company, passed away the latter part of March.

Lee Cadien, 47, vice-president, secretary, and a director of the Celanese Corporation of America, passed away suddenly March 18.

Hudson S. Bemis, 71, chairman of the board of Bemis Bros. Bag Company, passed away in St. Louis on March 17 following an illness of a week.

Thomas I. Charles, president and treasurer, Conestee Mills, Greenville, S. C., passed away after a sudden illness about the middle of March.

Bevan Funderburke, 43, cotton buyer for the Lancaster (S. C.) plant of Springs Cotton Mills, passed away April 2 in Columbia, S. C., of heart trouble.

Thomas Walter Garrett, master mechanic at the Easley (S. C.) Mills, passed away in Greenville, S. C., April 2.

D. C. Russell, superintendent of the Graniteville Company, Warrenville, S. C., drowned March 25 when his boat capsized and he was drawn over the dam by the current.

Charles A. Robinson, mechanical superintendent of the Merrimack Manufacturing Company, Lowell, Mass., passed away suddenly during March while visiting in Raleigh, N. C.

Adolph Bachmann, associated with the Warp Twisting-In Machine Company for over 23 years, passed away at his home in Midland Park, N. J., April 6, after a short illness.

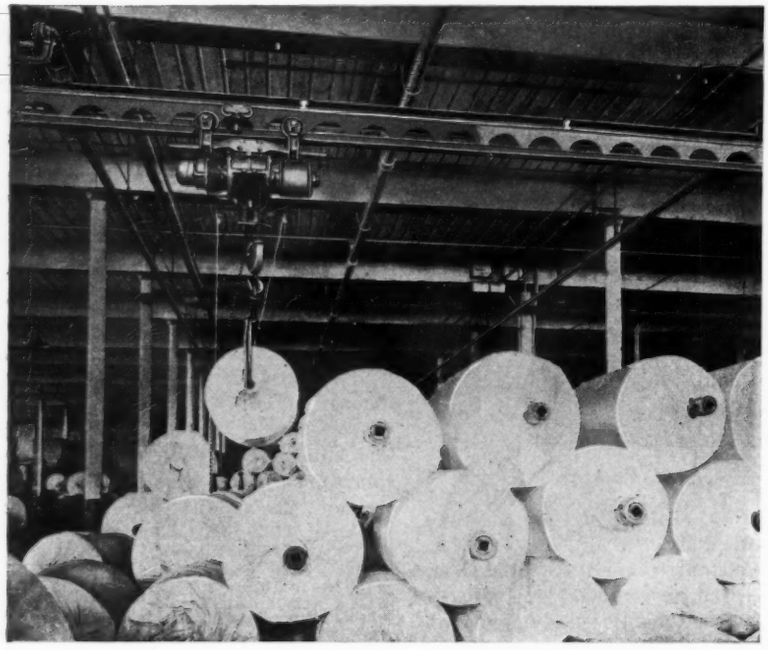
Dyeing Affinity of Rayolana Staple Fiber

The dyeing affinity of Rayolana, a new staple fiber of Courtaulds, Ltd., England, is said to be the same as wool. The new staple is said to have a pronounced affinity for many of the dyestuffs intended for application on acetate rayon. It is said that solid shades can be obtained on wool and this staple fiber in the same dyebath. According to the manufacturer, Rayolana possesses a greater affinity for all dyestuffs than most other textiles.

CLEVELAND TRAMRAIL

MATERIALS HANDLING EQUIPMENT

IN THE TEXTILE INDUSTRY



● For handling of cloth rolls in the bleachery, both in and out of the storage, a Tramrail hand propelled crane with hand propelled carrier and electric hoist has proven in this, as well as many other plants, to be an effective and economical method of performing this particular operation.

Consult your phone directory under Cleveland Tramrail.

CLEVELAND TRAMRAIL

Division of

THE CLEVELAND CRANE & ENGINEERING CO.

1175 Depot St.

WICKLIFFE, OHIO

A Faint Flicker of Light

A candle standing in the open a mile away is ordinarily a very weak source of light. At such a distance it produces, if it is a "standard" candle, less than 1/25,000,000 foot-candlepower of light. And yet that infinitesimal amount of light is sufficient to control an electric motor—and not simply to start the motor but even to make it reverse its direction of rotation. The device so sensitive to a faint flicker of light is the recording spectrophotometer, an instrument for precise measurement and determination of colors.

Of course such a candle is not actually used, but it is pointed out that even less than 1/25,000,000 of a foot-candlepower change in light intensity is sufficient to cause the motor of the spectrophotometer to reverse its direction of rotation, and thereby to record automatically the varying percentages of different wave lengths of light reflected or transmitted by the sample under investigation.

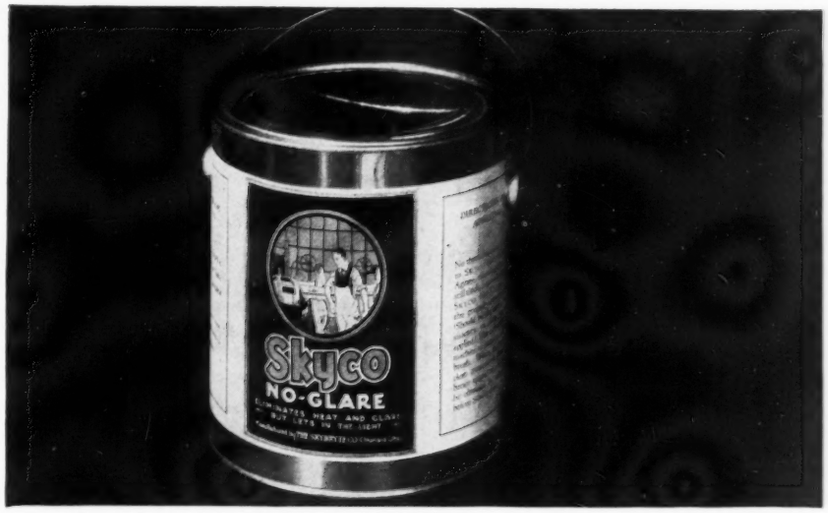
Spectrophotometry is that branch of science which deals with the measurement of the wavelength and intensity of spectral hues transmitted and reflected by colored materials. The fact that visual spectrophotometry has always been a slow and tedious procedure has retarded to a considerable extent man's ability to measure, standardize, and control color effectively. The development of photoelectric and vacuum tubes has now reached such a state that they have successfully assumed the visual duties in spectrophotometry, thus eliminating the tiring procedure of making comparisons by eye.

The recording spectrophotometer, invented by Professor A. C. Hardy of the Massachusetts Institute of Technology and developed for commercial application by the General Electric Company, employs these new tools created by research. It is now possible to obtain a complete spectral transmission or reflectance curve of a colored material in 2½ minutes, thus affording a fundamental specification of color.

◆

Twist Measurements

In an article on "Twist Measurements in Single Yarns," in the March issue of Textile Research, E. R. Schwarz, professor of textile engineering and in charge of textile research at Massachusetts Institute of Technology, discussed proper and improper sampling, technique and interpretation of data. Apt in this connection is his statement: "It is important that yarns be twisted. It is tragic if the investigator is twisted too."



Buy Your Window Shades in Cans

at 1-2c Per Square Foot!

SOLVE the expensive problem of eliminating glare and heat from factory windows and skylights through the use of SKYCO NO-GLARE, the sky-blue liquid which, when painted over glass, filters the fierce rays of the sun—shutting out all of the glare and 15% of the heat, yet it admits 94% of the light. The cost is only about ½c per square foot of glass covered.

For ten years NO-Glare has served many of our largest industries, saving them hundreds of thousands of dollars in expensive window shades. No-Glare has never been successfully imitated. If you have tried substitutes and been disappointed—try the **genuine.** If it does not live up to our claims, you may return it at our expense.

No-Glare is easy to apply, either to the inside or outside of the glass, and will stay on until removed with brush and warm water. Let this economical and effective product solve **your** problem. Use the coupon or write for a 1-gallon trial can on a money-back basis.

JUST OFF THE PRESS!

The Skybryte **Complete** Maintenance Catalog is just off the press. This valuable guide to modern maintenance should be in **your** files. Write for it.

Try NO-GLARE
at Our Risk

(Write or Use Coupon)

The SKYBRYTE Co.,
3129 Perkins Ave., Cleveland, Ohio.

Gentlemen:

Enclosed find trial order of 1-gallon of SKYCO NO-GLARE at $3.50. It is understood that if we are not satisfied we can ship it back collect and our money will be refunded.

Company _____

Street _____

City and State _____

PERSONAL NOTES
about Men You Know

SCOTT RUSSELL, Macon attorney, has been elected executive vice-president of the Bibb Manufacturing Company, Macon, Ga., and a member of the board of directors. Mr. Russell, who has been for a number of years general counsel for the corporation, has retired from the law firm of Jones, Sparks and Russell, to assume his duties with The Bibb immediately.

DAVID CROWELL, formerly assistant superintendent of one of the Cannon plants, Concord, N. C., has been made superintendent of the Courtenay Manufacturing Company, Newry, S. C.

MORELL MACKENZIE, formerly manager of the Glenlyon Print Works, Phillipsdale, R. I., has been made first vice-president of the Sayles Finishing Plants, Inc. Mr. Mackenzie will devote much of his time to the selling department of the company. JOHN HUTTON, who has been superintendent of the Glenlyon Print Works of the company since 1919, has been made manager, succeeding Mr. Mackenzie.

ALFRED A. JONES, who has represented the Fall River Bleachery in the New York and Boston markets for the past 12 years, has been made sales agent for the company, succeeding WALLACE G. STEWART, who is associated with the Kerr Bleachery, Concord, N. C., as the New York sales agent.

CHARLES H. DIMICK has been elected president of the Richmond Piece Dye Works, succeeding CONRAD WIRTH, of Zurich, Switzerland, who was elected chairman of the board. HERBERT SIEBEN was elected first vice-president. Mr. Dimick will also continue to be president of the Textile Dyeing & Printing Company of America, Fair Lawn, N. J.

I. F. CRAVEN, Ramseur, N. C., was elected president of the Pomona Manufacturing Company, Greensboro, N. C., succeeding DONALD COMER. Other new officers elected were M. A. BEARDEN, Greensboro, vice-president and general manager; G. W. MOUNTCASTLE, Lexington, vice-president and secretary; W. W. STEWART, New York, treasurer; and R. E. REEVES, assistant treasurer.

KENNETH L. RICE, superintendent of the Fall River (Mass.) Bleachery for the past 9 years, has resigned to become superintendent of the finishing plant of the United Merchants & Manufacturers Corp., Buenos Aires, Argentina, South America.

JOHN J. WILKEN, formerly associated with Marshall Field & Company for 11 years, has become associated with the Nashua Manufacturing Company in the sales division and will cover the New York market.

WILLIAM LEMKE, superintendent of the finishing at Bigelow-Sanford Carpet Company, Amsterdam, N. Y., has resigned his position.

FRANCIS C. HOLMES, formerly treasurer of the Plymouth Cordage Company, has been elected consultant vice-president; he is succeeded as treasurer by ELLIS W. BREWSTER.

HARRY J. FENTON, formerly superintendent of the Ideal Hosiery Mills, Maryville, Ky., has been made manager of the Murray (Ky.) Hosiery Mills, succeeding WILLIAM EGLOFF.

LAUREN N. HALE has been promoted to production manager of the manufacturing division of Marshall Field & Company, with headquarters at Spray, N. C. He succeeds LUTHER H. HODGES, recently made general manager.

J. L. DRAKE has become sales representative for Fairbanks, Morse & Company, and will handle the company's pumps and motors.

JACKSON L. WELDON, who has been with the Lanett (Ala.) Mill, a division of the West Point (Ga.) Manufacturing Company, has become assistant superintendent of the Dixie Cotton Mills, LaGrange, Ga., succeeding B. W. WHORTON, who recently became assistant superintendent of the Langdale (Ala.) Mill, also a division of the West Point group.

W. W. SHARP, JR., formerly paymaster of the Mock-Judson-Voehringer Company, Greensboro, N. C., will be the general manager of the company's new plant at Siler City, N. C.

C. E. DORN has been made overseer of spinning for the Bibb Manufacturing Company, Columbus, Ga., succeeding R. E. HENDERSON, who is now overseer of twisting. Mr. Dorn, who has been assistant superintendent of the Manchester (Ga.) plant of Callaway Mills, was previously overseer of weaving at the Bibb plant in Columbus.

PAUL R. MACKINNEY has been made president of United Dyewood, the parent company of American Dyewood, of which he is also president, succeeding the late J. C. BALDWIN, JR., who passed away last December.

RALPH H. HIGGINS, at one time connected with the Pomona Manufacturing Company, Greensboro, N. C., has been made overseer of spinning at the Pilot Mills Company, Raleigh, N. C.

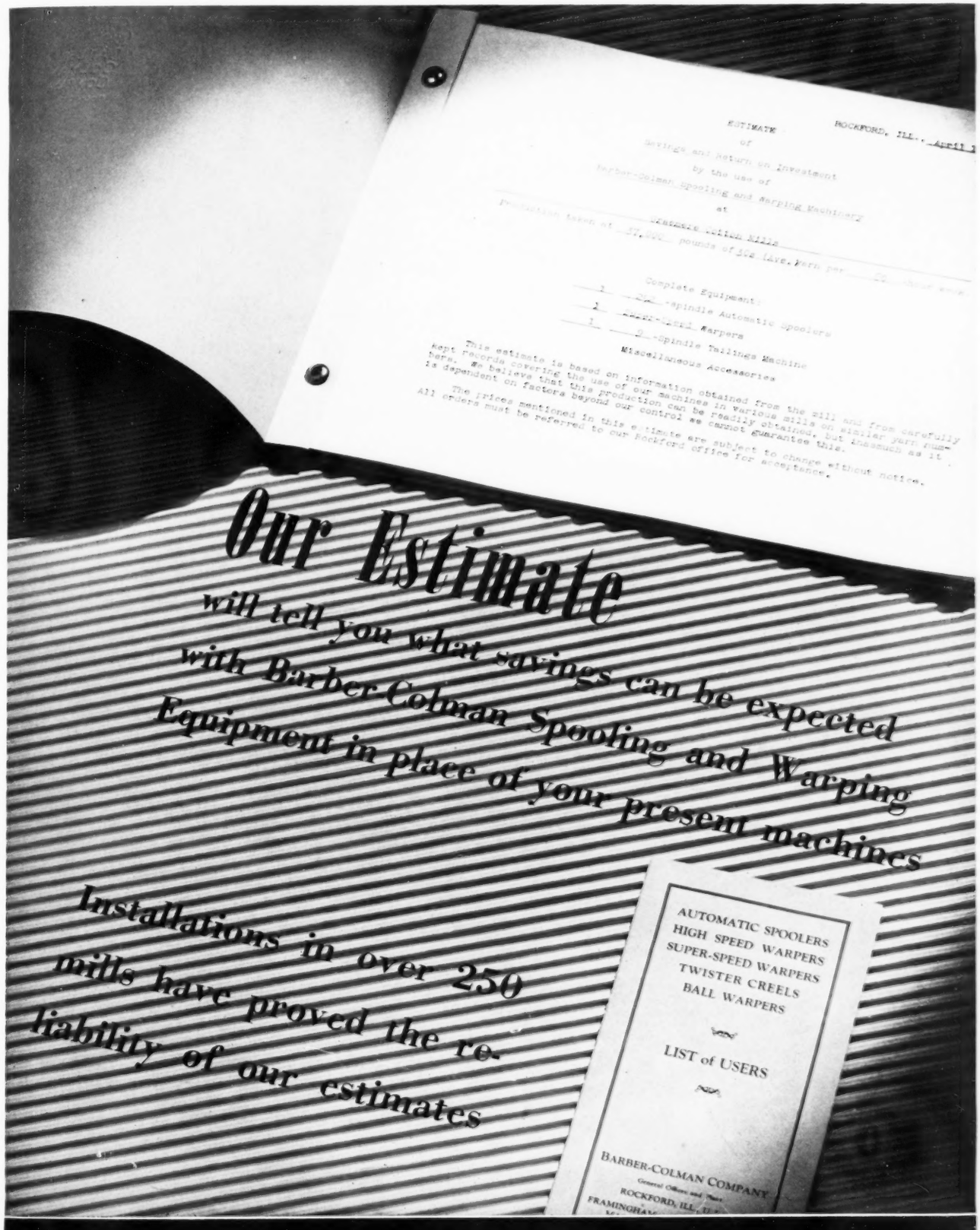
HENRY E. LITTLEJOHN, formerly southern manager of the Steel Heddle Manufacturing Company, has become associated with Drayton Mills, Spartanburg, S. C., in the capacity of stylist and designer. Mr. Littlejohn will devote much of his time to the development of new fabrics, and in contacting New York in connection with new styles and designs.

J. R. SIEGERS, for 16 years connected with the Lyons Piece Dye Works in charge of novelty finishes, and with the Hamilton Print Works, Clifton, N. J., has joined the Roxalin Flexible Lacquer Company, Elizabeth, N. J., as full-time consultant on lacquer printing. His services will be available to the industry.

DIAL F. SWEENY, who has had five years' experience in the textile cork business, has been appointed southern representative for Mitchell & Smith, Inc., Detroit, Mich., manufacturers of cork cots and other cork products. Mr. Sweeny will make his headquarters at 22 West Earle St., Greenville, S. C.

FRED M. ALLEN resigned his position as secretary-treasurer of the Southern Combed Yarn Spinners Association, effective April 1. The work of the organization will be directed and carried out by the president, R. D. Hall, the treasurer, J. C. Roberts, and M. G. Barnwell, for several years executive assistant, until future plans are perfected by the directors.

J. L. HART, who has been connected with the B. F. Goodrich Company, Akron, O., for a number of years, has been appointed to the Koroseal Sales Division of the company, and will cover the states of North and South Carolina in handling Koroseal products. He will maintain headquarters at 618 S. Main St., Greenville, S. C.


ESTIMATE
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of
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by the use of
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at
Complete Equipment:
-spindle Automatic Spoolers
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Miscellaneous Accessories
This estimate is based on information obtained from the mill and from carefully kept records covering the use of our machines in various mills of similar yarn numbers. We believe that this production can be readily obtained, but inasmuch as it is dependent on factors beyond our control we cannot guarantee this.
The prices mentioned in this estimate are subject to change without notice. All orders must be referred to our Rockford office for acceptance.
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mills have proved the re-
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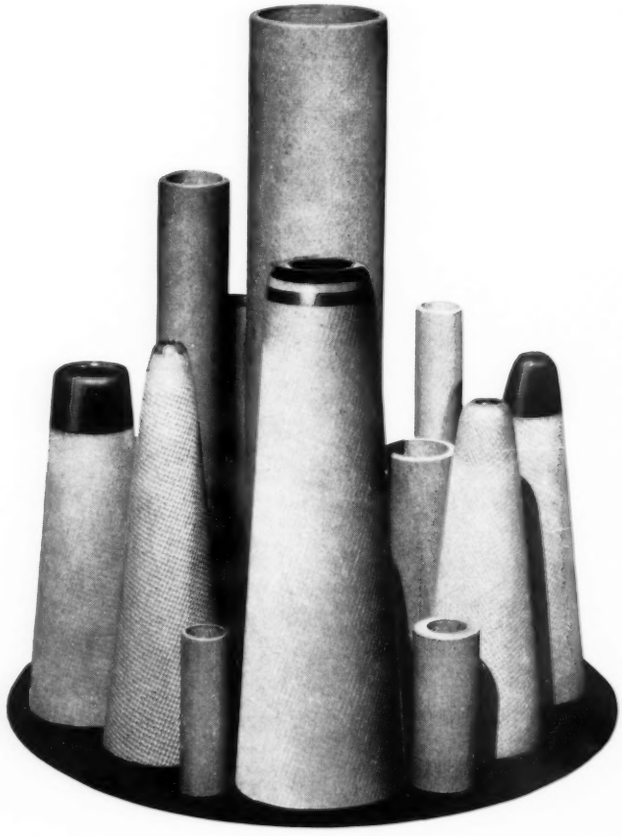

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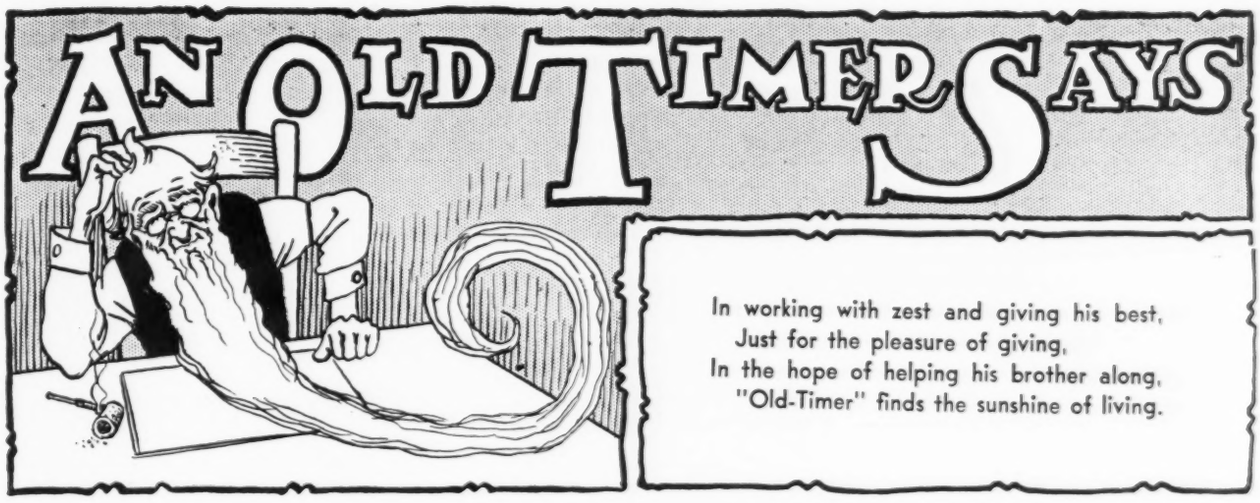

AN OLD TIMER SAYS
In working with zest and giving his best,
Just for the pleasure of giving,
In the hope of helping his brother along,
"Old-Timer" finds the sunshine of living.

Build Today—Retire Tomorrow

NEVER BEFORE in American history has it been so easy for an overseer or superintendent to build up an independent income. Many of you fellows after reading the foregoing statement will say: "Ho, hum,—how do you get that way?"

In the first place, those of you who know OLD-TIMER can vouch for the assertion that practically everything he writes is based on his own personal, practical experience, and, in the second place, the reasoning employed in this article can be easily confirmed by talking with most any banker or business man in your own community. In fact, most of you already know the facts which will be discussed in this article, but you are just not doing anything about it. Why?

Now that is not so easy to answer—that "why?". It is like a whole bunch of other "whys" that are hard to answer in reference to the actions and methods of numerous overseers and superintendents, as pointed out in many of the OLD-TIMER articles and illustrated by actual examples, along with the definite relation of many experiences. There are many overseers and superintendents who know *how* to run their jobs a lot better than they actually do run them, but to answer "why" they are guilty of such conduct—well, now, that's another story.

For example, any overseer of weaving knows that he should have a definite fool-proof system in order to insure having his loom rocker shaft bearings oiled, but ask ten of them to show you their systems and see what you get. Any overseer of spinning knows he should have a workable system to prevent high end piecing, but ask ten of them to explain their systems to you and probably more than one of them will say: "I just raise hell with all the section men and all the doffers whenever it gets bad."

All carding overseers know they should have some method or system that will insure their getting their cards set to the gauges they instruct the grinders to use for each setting, but ask ten of them to———

Oh well, let's get back to our subject. Never before in the history of America has it been so easy for an overseer or superintendent to build up an independent income, an income sufficient to live on when you wish to retire, providing you wish to retire before you get too darned old to enjoy the retirement. Yes, I know some of you will reply by saying, "Uncle Sam and my employer are going to take care of me in my old age, and they are taking out part of my salary every week or month now to help build up that income." As to that, OLD-TIMER wishes to ask first, how much do you estimate it will take for you and your wife and your auto to live on when you retire? (just as well count the auto as one of the family, because without the automobile—well, you see what I mean) and, in the next place, have you found out the approximate amount you will draw from this fund which you and your employer are now building up? Matters not what the amount is, OLD-TIMER believes that you could find something on which to spend about $200.00 per month more. In fact, unless he is badly fooled, he believes that about $200.00 per month more will be somewhat necessary, that is, unless you are willing to live on a much cheaper scale when you retire than you are living on now, and, gosh! if you are going to have to live like a man who has never had anything in his life, where in heck is the pleasure in retiring?

Now here's the truth, fellows. Twenty years ago when OLD-TIMER began to try to figure out some way that a man who is working for a salary or wages could invest his savings so he could hope some day to have enough to live on if he retired or got kicked out because he was too old or could not keep up with advancing conditions, or something—I say, if it had been as easy then as it is now, oh my gosh! OLD-TIMER would have had so much money he would not know what to spend it all for. You see, fellows, back in those days, you had to simply save up enough money out of your wages or salary to pay down most of the cost for anything you bought in the way of property, and most everything else. Mr. Auto Salesman did not come around and say: "Make me a payment of $500.00 and take this $2,000.00 auto", the furniture man did not beg you to give him a dollar and agree to send out that $50.00 bed-room suite nor the refrigerator salesman say, "Pay me $10.00 and I'll send this $150.00 refrigerator right out to your house." Neither did the real

estate dealer or the banker or Uncle Sam say, "Pay me $300.00 and this new $3,000.00 home is yours, and all you will have to pay to liquidate the principal or balance of $2,700.00, and pay the insurance and taxes, is about $25.00 per month or just about what you are now paying as rent." In fact, this price house usually rents for $30.00.

There is just one thing every man who hopes ever to accumulate anything in this world should find out, and that is, "how to use the other fellow's money." In these modern times, the government, the banks, the capitalist—all are trying every scheme known to get you to use their money, and at less than half of what it cost OLD-TIMER when he waked up to the fact that he would have to live about 300 years if he had to wait until he could save enough out of his salary to buy sufficient property or stocks or bonds or anything to bring the necessary income to live on.

Suppose we get down to brass tacks and state some facts, give some actual illustrations. Again let me apologize—no, that's not necessary, because enough of my readers know the circumstances of what I am about to relate to prevent me from enlarging on the truth, even if I had the desire to do so; therefore, you readers can depend on the following statements, as they are the result of OLD-TIMER'S actual experiences:

Last year we (OLD-TIMER and his real estate agent) built three dwelling houses, with the idea of selling them and obtaining a reasonable profit on our investment. These houses were built in a thriving southern city, not the largest nor one of the smallest cities. One house was a five-room house, built of brick, with hardwood floors, tile bath, furnace heat, which included a cooling (not a refrigerating) system to be used in summer, located in a good neighborhood on an avenue leading to the country club; lot about 50x175 feet, lighting fixtures, shrubbery and sodded front lawn included, the sale price $5,750.00. The man who bought this house only had to raise $1,250.00 to own this home, and the payments he is making are *less* than he would have to make if he were renting the house; in other words, for an investment of $1,250.00 he secures property well worth $6,000.00 by the time the principal is liquidated.

Now suppose some superintendent who has saved up say $5,000.00, had built or had some building firm to build for him four houses of the foregoing value—5000 ÷ 1250 = 4, that is, he would invest $1,250.00 in each of four houses. He of course would borrow the balance of the $23,000.00 from FHA or some insurance firm. The houses would rent, so the real estate agent claims, for $50.00 per month each, but suppose we say $45.00 per month to be on the safe side, then, 4 times $45.00 is $180.00 per month, which you can check up on and find is more than sufficient to carry the loan, liquidate the interest, pay taxes and insurance, and the principal would be paid up by the time that superintendent will be ready to retire. For an investment of $5,000.00 that superintendent has built up an income of $180.00 per month, and, as the slang expression goes, $180.00 a month is not to be sneezed at.

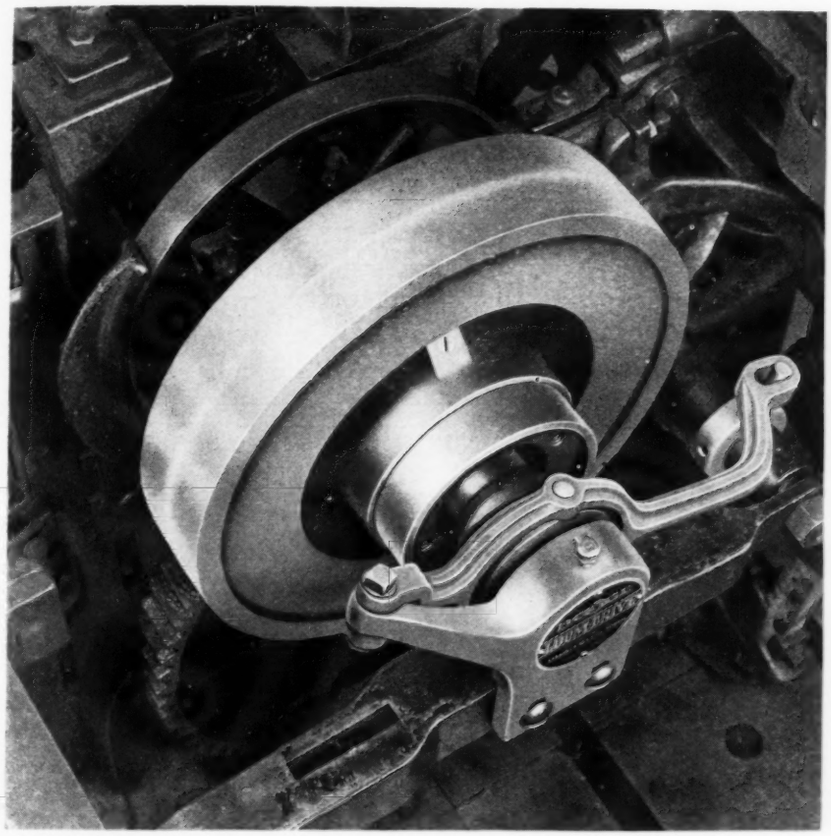
O. K. I heard you when you said that it is beyond the reach of the average overseer or superintendent to have $5,000.00 saved up. Well, how about $3,000.00? Is that too high, or even $1,500.00? And I know a whole bunch of weavers and other operatives who have got more than that in the bank right this very minute.

Here's what you can do with $3,000.00. On a $3,000.00 dwelling you can borrow $2,400.00, then that will take $600.00 of your $3,000.00 to own the first house. Now if it takes $600.00 to own one house and you had $3,000.00 to start with, 3000 ÷ 600 = 5. You can own five $3,000.00 houses, or $15,000.00 worth of property by investing $3,000.00, and when the rentals finish paying for them at the same time paying the taxes, insurance, and interest, you will own $15,000.00 worth of property that should be bringing you $125.00 per month.

Please note that with this $3,000.00 illustration, or $600.00 investment per house, you can apply it to most any amount of money you may have or can save per year or month. For example, suppose you have only $600.00; O. K.; you can make your first investment of $3,000.00 with that. Now suppose you can save $12.50 per week or $50.00 per month. O. K. again. You can go to most any good lumber firm and tell them you can pay $50.00 per month if they will build you a $2,500.00 house on that $500.00 lot you own. Very likely Mr. Lumber Man will say, "Sure, I'll build you a $2,500.00 house, you pay me $40 per month on the house and that will leave you $10.00 per month to pay on your lot." So you see, fellows, OLD-TIMER'S statement that never before in American history has it been so easy for our overseers and superintendents to build up an independent income was not an exaggeration after all. In fact, OLD-TIMER knows one overseer of carding that had about $12,000.00 in cash in 1916—That overseer is still living and is still overseer of carding, at the same mill where he was working in 1916. That was 21 years ago. Now if we should take that $12,000.00 and show you what it would have amounted to today if that overseer had started investing it then—Oh Boy! It would sound like a fairy tale. But, don't forget what we have told you, which are facts, and can be verified by talking with your banker, the president of your mill, or to any good business man.

If you have $600.00 you can make a $3,000.00 investment which should pay you $25.00 or $30.00 per month when all payments have been made. If you have five times $600.00 or $3,000.00 you can make a $15,000.00 investment which should result in an income of $125.00 to $150.00 per month. If you have ten times $600.00 or $6,000.00, you can make an investment of $30,000.00, which should result in an income of $250.00 to $300.00 per month. If you haven't got a red cent, but can make up your mind to save even $5.00 or $6.00 per week, you can make an investment of $1,500.00.

All of the foregoing reasoning has been based on the fact that you can now borrow 80 per cent on the actual value of property, but it is already practically assured that you will soon be able to borrow 90 per cent on the actual value of property. When, and if, that comes, the figures as given can be increased 10 per cent; that is, you will have a 10 per cent greater investment value for the same amount of cash you possess or can save, or you can make the same capital



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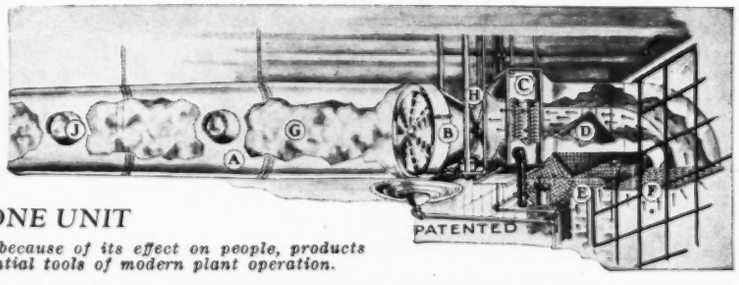

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investment as given in the foregoing illustrations, with 10 per cent less cash. (Since starting this article it has been announced in the daily papers that the FHA has passed the 90 per cent mortgage loan clause, and it is now possible to borrow 90 per cent instead of 80 per cent, so this is more reason why you should take advantage of the opportunity).

Just how any man whether he is overseer, superintendent, section man or operative, can fail to see the soundness of such a chance to accumulate something to build up an income for the future, OLD-TIMER cannot say. This would be as hard for him to answer as some of the questions he often puts to you overseers and superintendents with regard to your work.

Naturally, OLD-TIMER has talked to you only about real estate investments because, frankly, he is just a little prejudiced toward real estate investments, for this reason: When the panic, or depression, of eight years ago hit us, he had some real estate investments, some investment trusts, some rails and a few municipal and foreign bonds. All of the income from all of the investments mentioned, with the exception of his real estate, absolutely stopped; the firms just seemed to forget his address, and if he had not had a job in a cotton mill and had been depending on those investments of bonds, etc., for a living—well, it would have been no living at all; he would have just had to dry up, or something.

The income from the real estate did go down and down and down, but it did not stop. He could have possibly still had enough to get pork and beans out of it if he had not had a job. Naturally, that experience made him somewhat prejudiced toward real estate investments.

Please don't misunderstand; OLD-TIMER is not in the least trying to discount the value of other investments; he has simply given you the results of an actual experience; take it or leave it, and use your own judgment. And, to further demonstrate to you that he is not trying to tell you that real estate is the only thing to put your money in, will say that OLD-TIMER is what the average small investor would probably class as a large stock holder in two cotton mills, and is frank to state that during the depression referred to, the dividends from those cotton mills was *not* materially reduced. Now you say, if the dividends from his cotton mill stock were not materially reduced, even not as much as his investments in real estate, then why don't he put all his money in cotton mill stocks. Again the answer is: OLD-TIMER gave you an actual experience with regard to his investments in real estate without trying to compare it with any other kind of investment.

Now I want to digress for a moment and tell you of another kind of experience I had last night, not a cotton mill experience; nevertheless it may be of interest to some of our readers. This article is being written at Miami, Fla., the second week of February, 1938. Yes, I know I gave you the impression in a former article that I returned with JIM when his boss, Mr. Jackson, notified him that the card clothing for those nine cylinders had arrived, but I did not go all the way back with JIM; I left him at Jacksonville and came on down to Miami, and here I am, sitting out in the sun with nothing on but my beard and a pair of trunks, while I write this.

Since coming to Miami OLD-TIMER has been trying to see the sights and night life; he has taken in a cross-section, so to speak, which ranged from the high-falutin Rony Plaza and Dempsey-Vanderbilt (Jack Dempsey), where your ten dollar bill is just about gone when you pay your check, on down to the less expensive night clubs where you get by for two or three dollars. He has taken in the races at Hialeah, the Greyhound races, the Tai-Alia (pronounced Hi-li), the fastest game on earth, and many other interesting things. For the last several days he has noticed much advertising concerning the coming performance of Ted Shawn and his men dancers, (and, figuring that having tried most everything else, why not patronize the Terpsichorean arts? Can you imagine OLD-TIMER in that setting? Now the average reader may get the impression that when you say men dancers, it would be something a little "sissy", but that is far from correct. These men dancers, who had all been trained by Ted Shawn, gave interpretative dancing; that is, they talked to you through their dancing. For example, the program consisted of three acts: the past, the present and the future. In depicting the past they gave a dance showing the history of the Aztecs, a race of people whose history, despite their constant aggrandizement, was marred by the most hideous human sacrifices of any age. The dancers then pictured the progress of civilization, the last dance of the first act being entitled "The Forty-Niners"—the time of the gold rush; the second act covered the World War period, the jazz period, the depression—the aftermath of the great war. The dancers interpreting the Olympic games were most interesting; they showed cheer leaders (at foot-ball games), fencing, boxing, and, probably the most artistic dance of all, the basket ball. The third act, which carried us into the future, could hardly be explained to you unless you had seen it; therefore, we will pass that up, except to assure you that it was most interesting, appalling, beautiful, and all the other things you could say for it. Ted Shawn has been recognized as America's greatest dancer, teacher, and authority on the dance for more than 20 years.

The reader, I know, must realize that these men must have practically perfect physiques, and their bodies must be as near symmetrically perfect as is possible. Now, with the foregoing description, try, if you can, to picture in your own mind a large theater filled to capacity, with only a piano for music; one man on the stage (Ted Shawn), practically a perfect specimen of humanity, and supporting a cast of eight other men, all of whom show perfect co-ordination of lithe muscles and alert minds; not a sound except the piano and the tapping of the dancers' bare feet on the stage—not a word spoken—not a sign or announcement or anything to tell you what is going on on the stage, only the breathing of the audience there in the darkness, yet you sit there for two and a half hours enthralled, the spell being broken only at the end of the act, when the curtain drops, the lights come on—and then bed-

(Continued on page 133)

HOW OTHER MEN MANAGE

Comb Box Lubrication

EDITOR COTTON:

The subject of comb box lubrication on cards was brought rather forcibly to my attention by several oil salesmen recently. In an endeavor to check some of their claims, I have been running some tests. These tests are incomplete at this time, but as soon as they are completed, I will have some information which is already beginning to look interesting.

In the meantime, I would like to have expressions from other mill men on the following questions:

1. What is the speed of the pulley on the comb box? The average speed, and the maximum and minimum in the room?
2. What is the difference between the temperature of the comb box and the room temperature? The average difference, and the maximum and minimum difference? Is this temperature difference an indication of the power required to drive the comb? That is, does a higher temperature indicate more power is being consumed?
3. How often do you oil your comb boxes? How did you determine this oiling period? How much oil do you add at each oiling?
4. What is your oil consumption expressed in ounces of oil per 100 card-hours?
5. What type of oil gives best results: light oil, heavy oil, compounded oil, or straight run oils?
6. Did you ever examine the inside of a comb box for sludge, gum, stopped-up oil holes and bearings, etc.? If so, what did you find?
7. Where does the oil go which the comb box consumes? Does the quantity of oil in the box affect the temperature? That is, does a box over full run warmer than one under full?
8. Do you have any other ideas in general on comb box lubrication?

CONTRIBUTOR NO. 6826

Sizing Colored Warps

EDITOR COTTON:

In the past we have run all white combed yarns making goods 37 inches wide with from 5,000 to 7,000 ends in the warps, and now we are going into stripes and solid colors of the same counts. We find that we are not getting the same results in the slashing. We use imported potato starch. If there are some changes necessary to make in the slashing when going from white to colored goods, we shall greatly appreciate this advice from some of the readers of COTTON.

CONTRIBUTOR NO. 6797

Dirty Card Flats

This man solved the problem of dirty flats and is passing his method of doing so along to you . .

EDITOR COTTON:

This replies to "CONTRIBUTOR NO. 6787". He has asked a question on page 95 of the March issue of COTTON concerning a method of cleaning card flats.

There probably are a dozen reasons why card flats load up and get dirty. There are also equally as many remedies for keeping them clean. Our card flats were loading up badly, not only with cotton, but with pieces of hull, dirt, etc. To keep them anywhere near clean it required our running a wire stripping brush on the back of the card about every three weeks. As this was detrimental to the flats, especially the old sets, we had to discontinue this method of cleaning them.

We then experimented with the flat stripping brushes and set them where they would barely touch the bottom of the flats without the bristles bending. This helped a little but not much. Although the bristles in these brushes were rather short, they looked pretty well, but upon close examination we found they were lifeless and were merely dragging through the flats instead of brushing them out. We bought a few new brushes and tried them out on cards after the flats had been cleaned out, and the brushes kept them clean. After this experiment, we had all of our old brushes repaired with new bristles and set so they would just touch the bottom of the flats without bending the bristles.

It has been my experience that setting flat brushes too deep tends to pack the cotton and dirt in the flats rather than to clean them out.

This is only one man's experience with dirty flats, but it has been nearly three years ago that we did this and we have had no trouble since, and we are still running the same type of cotton and the same settings on the cards as before.

CONTRIBUTOR NO. 6823

EDITOR COTTON:

This is in answer to "CONTRIBUTOR NO. 6787" who is having trouble with dirty flats. The chances are that he is carding very heavy on these flats, and thereby changing the pitch of wire; in other words, bending the wire back at the foundation, and when so doing it forms a bend from the knee to the face of the foundation. One way of cleaning these flats is to reverse the spiral bristle brush and drive it from the cylinder pulley, running it against the point of the wire in the flat; by doing this, it would lift the load up to the surface of the wire and by putting a stripping roll on the grinder stand for the flats and driv-

ing the flats from the eccentric flat pulley, this will run the roll very slow, and I believe one time around on the flats will have them clean.

CONTRIBUTOR NO. 6824

How Do You Set Pickers?

EDITOR COTTON:

I should like some information on the following questions pertaining to the setting of pickers on box looms.

1. Should the spindle on which the picker works on the box end of the loom be bent inwards at the front to make the shuttle run to the reed as it leaves the box?

2. Should a hole be cut in the picker for the box end before it is put on, or should the picker be placed in the loom, a place marked by the nose of the shuttle, and then the picker taken off and bored where the nose of the shuttle marks the picker?

3. Should the picker be set to the shuttle or should the shuttle be set to the picker?

CONTRIBUTOR NO. 6803

High Band Breakage

EDITOR COTTON:

We are having a great deal of trouble with what we consider an excessive amount of band breakage. On 26,000 spindles running two shifts, we have to tie on from two to three thousand bands per day.

We have here an Easton & Burnham band twisting machine, and have tried all types of roving, yarn, plied yarn, etc., in order to try to get to the correct type of band, with very little success. We are now using a braided type band which does a little better but not enough.

We have tried all sorts of knots, chicken-head knots, square knots, Portuguese knots, etc., with very little luck.

Our problem is that the bands generally break at the knot, although we have some loss from bands slipping off as well. We have tried to analyze the reasons for this but have come to no very definite conclusions.

One of the major difficulties may be that the outside humidity conditions are extremely variable, running from 40 degrees to 95 degrees sometimes in one day. We keep a reasonably good average inside humidity of from 50 degrees to 55 degrees in our spinning room, but we notice that when it is very humid outside, regardless of the readings inside, we get a great deal of trouble with bands. It seems almost foolish to say that we feel the outside humidity conditions affect us when our inside readings are fairly stable, but nevertheless this is the case and we cannot seem to explain it.

Could any of your contributors help us with the following:

1. Are we correct that having to tie on from two to three thousand bands per day is very excessive on 26,000 spindles running two shifts?

2. What would the normal amount be?

3. What other cause besides humidity may there be for band breakage; or are humidity changes generally the main cause?

4. Outside of the use of some very expensive band equalizing device, is there any simple method of applying bands at an even tension or of setting up standards for tying on?

5. Are there any solutions we can secure which would render our bands impervious to atmospheric conditions?

6. Is there any special kind of knot which could be used to stop breakage at the knot?

7. In general are there any suggestions which might be helpful in solving this problem?

8. Should the braided type of band be stretched?

CONTRIBUTOR NO. 6820

Speed of Fly Frames

IN A DISCUSSION AMONG CARDERS, the question "Will an excess speed on slubber or fly frame cause a weak break?" came up. There was a bit difference of opinion, one man contending that when running the proper draft and light slivers, excessive speed gives the stronger break. He then went on to say, make the following test:

Let us assume that we are running a .50-hank roving with a front roll speed of 189 r.p.m. Change the speed of the frame so that the speed of the front roll will be 226 r.p.m. Break the yarn from the bobbins made at the right speed and then break the yarn from the bobbins made with the frame at excess speed and you will find that the bobbin built by the higher speed front roll will give the strongest break. Of course, it must be understood that all fly frames should be run at a speed for which the cones were modified.

It may be seen from the foregoing that this man is referring to roll speed. The next man discussed it from the spindle speed standpoint, saying that excessive spindle speed is not beneficial for quality work. "A slubber should not be over 10x5 in size with a spindle speed of not over 450 or 500 r.p.m. instead of 800 r.p.m. standard. I have in mind right now a mill that has a 12x6 slubber with a spindle speed of 300 instead of a spindle speed of 660 r.p.m. as a standard. In a large package at high speed the roving is strained by the centrifugal force exerted on the bobbins of cotton; also high speed demands more twist in the roving. I am a horse and buggy man and I cannot quite reconcile myself to the modern theory of high speeds and long drafts, but it may come in time. However, as yet there is not the *proper control* of fibers."

Still another man said that high speeds will cause a weaker break because the increased speed will increase the pressure on the paddle, causing an excess drag of the stock at the paddle and stretching it; also, the excess vibration of the spindle in the bolster will cause an excess amount of end breakage on these frames, and this, of course, will weaken the yarn every time there is a piecing up of these ends. To get away from this, naturally, the first thing most men think of is inserting more twist into the roving, which will

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cause hard ends, making end breakage at the next process. If they then open up the rolls in order to get away from this, they are getting uneven work, as the stock will draw in thick and thin places, thereby weakening the yarn.

The coarser the numbers the more the spindle speed or speed of the frame should be decreased. We can generally slow the frame up and take out enough twist to put the front roll speed back where it was formerly and not lose on the production, having ends down and a much smoother and stronger finished product.

Any readers of COTTON are welcome to submit their opinions on this subject.

Life Of Loom Parts Compared

When running 16 hours a day and when running 24 hours a day . . . . .

EDITOR COTTON:

There has been a question in my mind for a number of years, and the same question has been asked me many times by salesmen and other mill men—"Does the life of loom parts increase or decrease in loom-hours when the mill runs 24 hours a day instead of 16 hours a day with an 8-hour rest?"

During the year 1936 I kept a record of certain loom supplies and we only operated two 8-hour shifts. Then for the year 1937 I kept a record of the same supplies and we operated three full 8-hour shifts. I have compiled a few records and figured each into loom hours and I am passing them along to the readers of COTTON; perhaps the figures will stimulate some interest and discussion in this subject.

1936 Two-shift (16 hours) Run: Loom Hours Operated by Parts				
Shuttles	Check Straps	Lug Straps	Pickers	Picker Sticks
4659	4322	4751	2259	6779
1937 Three-Shift (24 hours) Run: Loom Hours Operated by Parts				
Shuttles	Check Straps	Lug Straps	Pickers	Picker Sticks
4157	3594	4300	1360	5324

When we began to run three shifts we contemplated using more supplies because we had to put a number of men on loom fixing jobs that were not seasoned and naturally they would use more supplies and possibly break more parts, or cause them to be broken. We feel that this condition had something to do with the loom-hour life of parts being somewhat lower in 1937 than in 1936.

CONTRIBUTOR NO. 6776

(These figures, as are any average-life figures, are interesting. During the year 1934 the editor of COTTON made a survey of a number of print cloth mills, the same type mill as this contributor's, and produced the information in table form. At that time the average life in loom-hours for shuttles was 3185, for pickers 2328, and for check straps 5662.—The Editors.)

A soft-hearted slasher man is a slasher tender.

◆

A time-study engineer is a man who is paid to wonder why other people don't work faster.

Question on Grid Bars And Blending Process

EDITOR COTTON:

There are two questions concerning the opening and picking department that I would like to see discussed in COTTON. The first of these is on the correct setting of the grid bars to the beater.

Next, I would like to get some information or a suggestion for a blending process for colored cotton. I am having striped filling now, and would appreciate a reader of COTTON telling me how I can remedy it. The cotton is going into novelty weaving yarns.

At the present I am making a 13-ounce lap, doffing it in 7 minutes. The cotton is ⅞-inch. The picking is single-process with the breaker beater having a speed of 1,100 r.p.m. The cylinder is 20 inches in diameter. The intermediate section has a 2-blade beater also making 1,100 r.p.m. The finisher section has a carding beater and it is making 975 r.p.m. The length of the lap is 50 yards.

CONTRIBUTOR NO. 6825

Report of Danville Meeting

(Continued from page 95)

nan told of using a rounded traveler, different from either the square point or the round point, and said that much fuzziness had been eliminated thereby. Also, a traveler heavy enough to prevent the yarn touching the separators should be used, but no traveler should be run too long. He explained that the mills are using more sizing now than formerly, because the operating executives have found that starch is cheaper than cotton, and that the heavier size holds the yarn down and eliminates much of the fuzziness. J. C. Pirkle, Durham (N. C.) Cotton Manufacturing Company, uses the oil spray and has found it beneficial, especially on knitting yarns. He has also changed from the blade beater to the Kirschner beater, which proved helpful. It is also better not to have the roll settings too far apart, or fuzzy yarn will be in evidence. Mr. Anderson asked if there is more fuzzy yarn this year than last, and Mr. Jennings replied in the affirmative. W. N. McCann has found the oil spray beneficial, and also suggested using a piece of rabbit fur in the shuttle to eliminate fuzzy yarn.

Fastening Spinning Tapes

Methods of fastening spinning tapes, and the type weaves best to use in the manufacture of tapes were taken up. Mr. Brannan favors the herringbone tape because he has found it to last longer, and suggested lapping the ends of the tape from 1½ to 2 inches, sewing it "X" fashion on the end, and stitching it down the sides. His tapes run 18 months or two years. J. L. Rhinehardt, Pickett Cotton Mills, Inc., High Point, N. C., prefers the tape woven with close weave. The tape is woven at his plant, and according to his weaver the strength of the tape is in the warp. When the tape is made heavy with filling it does not increase the strength, and it is even more likely to break because of stiffness. Ray Butler, engineering department, Marshall Field & Company, Spray, N. C., suggested cutting the tape at an angle before sewing, which thereby increases the life.

The next discussion was on methods of preventing shading in mocks. One member suggested having even drafts and even dyeing. Mr. Holt explained that often the shading is caused by one end of colored roving

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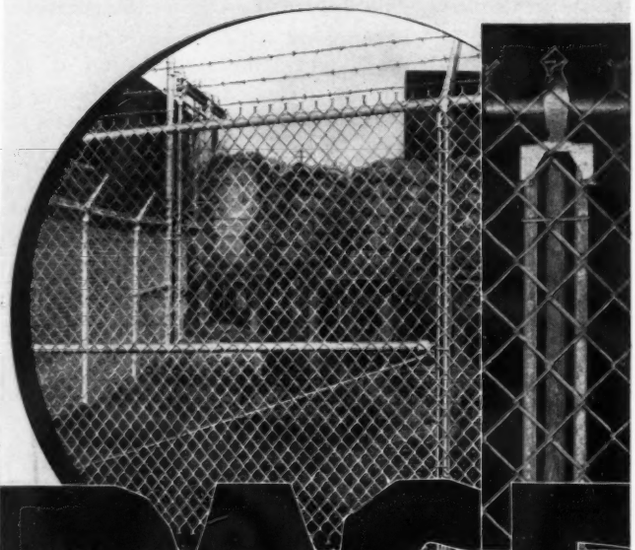

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crossing over and getting on the opposite side from where it belongs. It may start off on the left side and eventually get over on the right side. He suggested creeling the colored bobbins in a relative position at all times which will aid in preventing shading. He also explained the double trumpet, which holds the rovings apart so that the colored and white will not cross, will solve the problem, though this system is not always satisfactory from a running standpoint, as it often holds the roving too far apart. The use of wire separators was also explained. Other members thought the diameter of the whorl on the spindle had much to do with shading in mocks: one considered shorter and evener drafts as the solution. Mr. Holt said that if the stock is dyed and held in storage for a long period, it will have a different shade from that dyed and run immediately. Still another member considered shading in mocks due to the spindles being off center.

The last question was on cleaning overhead in the spinning room. Mr. Dennis runs two 8-hour shifts, yarns from 10s to 30s, has overhead drive, and has much lint in the room. He cleans overhead by blowing on Monday, Wednesday, and Friday on the day shift, during the 30-minute stop, and has the lint picked up before starting up again. Another member blows down overhead every two weeks on long draft spinning and covers everything before doing so. One man blows down overhead each day when the mill is stopped, which prevents any great amount of lint accumulating.

Mr. Anderson at this point injected a question asking for the relative breaking strength of cotton and rayon yarns. Mr. Bingham advised him that the breaking strength of 1½ denier rayon yarn, of the same count as cotton, is about 10 per cent less than cotton. In making yarns of rayon he uses a slubber twist multiple of .65 or .70, intermediate of .75 or .80, and speeder of .90 or .95. The hank roving made is 4.00 or 5.00. In the spinning the twist multiple depends on the farbic into which the yarn is going, warp being from 4.00 to 4.50. Mr. Brannan said the breaking strength of rayon from 20s and heavier is from 10 to 20 per cent better than cotton of the same count. He uses 3.75 twist multiple on warp and 3.00 on filling. He said that on 6s, 7s, and 8s, the 120 yard rayon skein would break 475 pounds.

This closed the practical discussion. J. H. McDonald, A. A. Shuford Mill Company, Hickory, N. C., was elected to the executive committee.

Report of Gastonia Meeting

(Continued from page 97

the week-end, and possibly for several weeks, and wanted to know what to do about the soft places. Mr. Williams said that the rollers could be turned and the yarn would not stick. Mr. Dilling suggested letting the water rolls dry before stopping off for the week-end. Mr. Cauble said that he has had the trouble and now he lifts the water rolls up for about a minute before stopping time and eliminates this difficulty. Mr. Dilling also reported that he has slowed down on the traverse at times.

Half-Round or Oval-Shaped Twister Travelers

T. L. Richie, Victor Ring Traveler Company, was called on to discuss this question. He explained that more of the half-round or oval travelers have been sold lately than ever before. They were originally made for the manufacture of slub yarn, as they will allow the slub to go through the traveler better. Also, since the inception of spun rayon, it has been found that the half-round traveler works better than the flat traveler because there is not the pronounced bend that the flat traveler gives the yarn. A. D. Carter, of Carter Traveler Co., Gastonia, also explained the use of the oval traveler, saying that it adjusts itself better on certain types of yarn. Both rayon and thread mills use them. On oval travelers it is better to use one number heavier so that the friction will be adequately taken care of.

Re-Working Spinning and Twisting Rings

A. P. Richie was called on to discuss the advantage of using re-worked spinning and twister rings. He has used re-worked spinning rings to his satisfaction, but cautioned that the condition of the rings before being re-worked must be taken into consideration. If the rings are worn badly, after they are re-worked they will use many more travelers and they will not be a paying proposition. Also, if the twister rings are in good condition, they can be re-worked and good results can be secured. The rings, when re-worked, he advised, will not be as good as new, and they will not run as good as new, but they can be run if they are in good condition before being re-worked. John W. Long has had satisfactory experience with re-worked twister rings, but unsatisfactory experience with re-worked spinning rings, the latter lasting only a short time after being re-worked.

Safety in the Textile Mill

Stuart H. Sherman was asked to give the benefits of a safety program in the textile mill, and he outlined some of the work done at his plant, showing the direct results of a safety campaign. Mr. Sherman is enthusiastic on this subject and believes it will pay the mill to foster such a program. He told of having the first aid course being given at his plant, and stated that since the operatives have learned to treat minor injuries there has not been a single lost-time accident at his plant due to infection from minor injuries. He brought out that the safety program is just as important as the technical operation of the plant, and as it involves the human element, the mill will be repaid for any time spent in getting the employees enthusiastic over a safety program and making them safety conscious. He announced the statewide safety council meeting at Asheville on June 10-11, and invited those interested to attend.

This closed the regular discussion. Announcement was made of the annual meeting of the Southern Textile Association, which will be held this year June 17-18 at Mayview Manor, Blowing Rock, N. C.

An Old-Timer Says—

(Continued from page 127)

lam breaks loose; the people go wild with cheering and the dancers are brought back repeatedly to answer curtain calls.

And then you see OLD-TIMER sitting there trying to take it all in and you wonder if he is finding anything to help him out in fixing looms, grinding cards, etc., etc., in a cotton mill.

Well, I don't know that I can give you a very good answer to that one, but if you ever have an opportunity to see Ted Shawn and his men dancers you can answer that question yourself.

Editors' Note:—If any of Old-Timer's readers got the impression that the article, "Old-Timer and Jim Go to Florida" was written with the idea of getting that message to mill presidents and treasurers, this is to explain that Old-Timer's conversation with Mr. Jackson, Jim's boss, was written with the sole idea of giving you overseers and superintendents a sound practical argument which you can put up to your boss when your mill is on short time.

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COMMENT on the Cotton Market

New Orleans, April 18, 1938.

DURING most of the period under review the cotton market was under pressure of poor trade advices, small consumption, large supplies and uneasiness over the European political situation. Of late, however, developments of a favorable nature came to the surface, and values responded by recovering sharply. Compared with one month ago, prices show no appreciable change, ruling a shade higher.

Constructive developments were: Extending the loan privilege three months, improved European politics, unfavorable weather, less favorable crop advices, a better demand for cotton goods, and prospects of inflation, expected to come of the government's contemplated large spending program.

The government extended the loan privilege by three months, or from March 31 to July 1, which is expected to attract more cotton to the Commodity Credit Corporation. As the cotton comes under the loan plan, just that much more will likely be withheld from the market, probably until the situation justifies release of same in part, which release may not occur in volume until a much better price is obtainable.

Recently the Commodity Credit Corporation was credited with reporting loans completed total 5,323,265 bales.

While the trade appears to be disappointed concerning the small export demand and small domestic consumption, particularly as to the shrinkage in world spinners' takings of American thus far this season, it is not discouraged since sentiment lately seems to be inclined to be less pessimistic. In fact there appears to be a growing feeling that the worst is about over, and with politics abroad improved, prospects of less free cotton to be offered since loans are to continue until July 1, it would probably not take much in the way of trade betterment to create optimism as to the future. Deflation seems to have run its course, and it is apt to be replaced with something akin to inflation; the intent of which would be to increase purchasing power and stimulate general business.

The Department of Agriculture reported final ginnings this season at 18,242,000 running bales, equal to 18,934,000 bales of 500 pounds each, which compared with the December estimate of 18,746,000 bales of 500 pounds, and the previous record of 17,978,000 bales of 500 pounds in 1926.

The indicated increase in this year's acreage over the original set figure, or 4 per cent increase per state allowable, would give an additional 1,052,000 acres to the cotton region, and would make the total for the year of around 27,400,000 acres versus about 26,300,000 originally decided upon. This feature of the acreage had but a passing influence on the market, more attention being directed to possible trade developments to come of the government's contemplated spending program.

Late advices from the interior are to the effect that unfavorable weather prevailed over the whole belt during the first half of April, farm work and planting being interrupted. Low temperatures and much rain prevailed, necessitating much replanting, and much field work to be done over, while considerable of fertilizer in the southern portions has been lost. To the west of the Mississippi river, preparations are reported about two weeks late, about the same conditions in the central belt, and slightly below normal in the Atlantics. Even in the Lower Rio Grande, the early section of Southwest Texas, did not escape the cold, and much replanting is said to be necessary in that usually early district. With prospects of the smallest acreage in many years, and a late start, future developments inland will be watched with interest.

The present outlook seems better, for while there is the want of a better demand for spots, there is improvement in the goods market. Offerings of the actual are reported light, with the basis firm. It appears that the early start of the new crop has been changed to a late one, due to the recent wet, cold weather, and there is a feeling that confidence will likely return soon.

◆

CENSUS REPORT

United States— Bales—	This season	Last season
Consumption of lint in Cotton Growing States, March	428,000	640,000
In New England States, March	68,000	111,000
In All Other States, March	15,000	26,000
In the United States, March	511,000	777,000
In the United States, February	428,000	666,000
Consumption of lint in Cotton Growing States, 8 months	3,421,000	4,419,000
In New England States, 8 months	496,000	710,000
In All Other States, 8 months	107,000	169,000
In the United States, 8 months	4,024,000	5,298,000
Mill stocks, March 31	1,772,000	2,078,000
Stock in public storage and warehouses, March 31	10,956,000	5,036,000
Stock in mills, public storage & warehouses, March 31	12,728,000	7,114,000
Stock in mills, public storage and warehouses, Feb. 28	13,471,000	8,023,000
Active spindles in Cotton Growing States, March	16,790,000	17,761,000
In New England States, March	4,878,000	6,135,000
In All Other States, March	620,000	744,000
In the United States, March	22,288,000	24,640,000
In the United States, February	22,357,000	24,518,000

BRITISH BOARD OF TRADE REPORT FOR MARCH

Year—	1938	1937	1936
Exports of yarn, lbs.	13,000,000	15,000,000	13,000,000
Exports of cloth, yards	129,000,000	179,000,000	173,000,000

AMERICAN COTTON

August 1 to April 15— Bales—	This season	Last season
Brought into sight (Marketed)	14,390,000	12,930,000
Exports from the U. S., incl. Canada	5,131,000	4,853,000
Spinners takings, world	9,592,000	11,394,000
Stock at all U. S. ports, April 15	2,852,000	1,693,000

WORLD'S VISIBLE SUPPLY OF COTTON

April 15— Bales—	This year	Last year
American	7,794,000	4,952,000
Other kinds	2,175,000	2,433,000
All kinds	9,969,000	7,385,000

Changes in Armstrong's Textile Division

Consolidation of the textile and shoe products divisions of the Armstrong Cork Products Company, has been announced at the general offices of the company at Lancaster, Pa. According to the announcement, the merger has been effected to provide for greater efficiency in development work and sales effort, since the problems of these divisions are similar in many respects.

The new textile and shoe products division will be headed by W. B. Tucker as general manager. Mr. Tucker has been general manager of the textile division for the past six years. He will be assisted by W. F. Mansur as manager of the shoe products department and by T. L. Hill as manager of the textile department. H. C. Stouffer will continue as Mr. Mansur's assistant.

T. L. Hill has been manager of the Greenville (S. C.) office of the textile division for the past six years and will be succeeded in Greenville by J. V. Ashley, senior salesman of that office. D. N. Herr, formerly of the Lancaster office, has been assigned to Greenville as a salesman in the textile department.

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Here is presented an important service used every month by hundreds of COTTON readers. The listings explain themselves. The Manuals, Reference Books and Catalogs, containing information of unusual value in mill construction and operation, will be sent you without obligation. Read through the list carefully. Then simply fill in on the coupon the number of those which interest you, and mail it to COTTON.

This service is for men engaged in textile manufacturing only. Requests received from those not in the industry cannot be handled

Advertisers in this Issue Offer you . . . . . .

205. The Walker Method—8 page illustrated catalog describing the Walker method of quickly checking the efficiency of machinery. This improved method eliminates the losses resulting from improperly adjusted equipment. Walker Electrical Company, 926 Means St., Atlanta, Ga.

213. Saco-Lowell Cotton Machinery—Twisting—a 36 page illustrated brochure explaining the company's twisters and parts, including the four basic type twisters, features of new construction and general notes on twisting. Production calculations and specifications are included. Saco-Lowell Shops, 147 Milk St., Boston, Mass.

214. Saco-Lowell Cotton Machinery—Spinning—the second edition of a 56-page booklet, illustrated with the company's product and containing valuable charts, production tables and other spinning data. Saco-Lowell Shops, 147 Milk St., Boston, Mass.

217. Diamond Fibre Hollow Ware—32 page booklet and catalog, attractively illustrated, showing various types of boxes, trucks, cans, barrels, baskets and trays of Diamond Fibre Hollow Ware. Of interest to every mill man in solving material handling problems. Free on request. Continental-Diamond Fibre Co., Dept. C, Wilmington, Delaware.

218. Butterworth Electric Guiders—6-page folder describing and illustrating the new Butterworth Electric Cloth Guider. This guider is built on the same principle as the Foxwell Air Guider and is unexcelled for fast, accurate guiding. H. W. Butterworth & Sons Co., Philadelphia, Pa.

219. My Strap-Book by Doc Steelstrap—16 page illustrated catalog describing the hundreds of ways that Acme steel strap can be used to advantage in connection with paper boxes and wraps in making safe, economical shipping boxes. The strap-book will convince you that Doc Steelstrap and his assistants do a thorough job of the packing and shipping business. Acme Steel Co., Chicago, Ill.

223. Alloyed Iron in Southern Industrial Fields—16 page illustrated catalog dealing with the properties available in modern cast irons. International Nickel Co., 67 Wall St., New York, N. Y.

224. "Tank Talk"—Sixteen page booklet of illustrations showing various types of elevated steel tanks, constructed and erected by manufacturers as well as stand pipes, reservoirs, storage and high pressure vessels, cylinders, along with helpful technical data. Also a list of what a few of the cotton mills, etc., said. R. D. Cole Manufacturing Company, Newnan, Georgia.

228. Solutions for Your Problems—20-page illustrated booklet containing valuable information on the scouring and processing of wool and other fibres. Detergent Products Corp., Atlanta, Ga.

231. Spindle Tape Lacing Equipment—Illustrated folder describing the new Clipper spinning tape lacing equipment, gives vibration chart, prices, specifications and other valuable information. Clipper Belt Lacer Co., Grand Rapids, Mich.

232. Condenser Tape Lacing Equipment—Describing in detail the new Clipper condenser tape lacing equipment, this folder contains table of decimal equivalents, prices, specifications and illustrations of the lacer, hooks and cutter. Clipper Belt Lacer Co., Grand Rapids, Mich.

233. Catalog No. 22—an attractive illustrated catalog describing in detail the Shamrock shipping containers and the new canvas trucks for textile use. Meese, Inc., Madison, Ind.

234. They Stay Brighter Longer—This interesting illustrated booklet containing facts about Mazda lamps will be sent you free on request. General Electric Company, Dept. 166, Nela Park, Cleveland, Ohio.

235. The Guide—a ready reference book which will prove of great help to textile mill engineers in selecting Valves, Boiler Mountings and Lubricating Devices. Products are grouped by pressure, type and use. The Lunkenheimer Co., Cincinnati, Ohio.

236. Lunkenheimer Catalog—describing and listing the entire Lunkenheimer line of Valves, Water Columns, Water Gauges, Gauge Cocks, Fittings, Unions, Air Nozzles, Lubricators, Oil and Grease Cups, etc. The Lunkenheimer Co., Cincinnati, Ohio.

238. Glorified Light—A 32-page book illustrative of the vital part proper painting plays in scientific lighting and in the reduction of maintenance and production costs. Pittsburgh Plate Glass Co., Pittsburgh, Pa.

240. The New Proctor Automatic Yarn Dryer—6 page illustrated folder describing the new Proctor automatic yarn dryer which has the exclusive new Proctor traveling skein protector. Proctor & Schwartz, Inc., Philadelphia, Pa.

244. Turbine Pumps—as used for irrigation and all municipal and industrial purposes. A forty-page illustrated and descriptive bulletin furnished free by Pomona Pump Co., Pomona, Calif., or 4301-7 So. Spring Ave., St. Louis, Mo.

245. Design Wheels for Brinton Knitting Machines—16 page illustrated booklet which gives helpful information on design wheels for Brinton knitting machines. A copy of this booklet should be in the hands of every knitter. H. Brinton Co., Philadelphia, Pa.

251. Brown Thermometers and Pressure Gauges—New 71 page book illustrating and describing the Brown indicating, recording and controlling thermometers and gauges. Explaining their many advantages to the textile plant, this valuable book should be in the possession of every mill executive and department head. The Brown Instrument Co., Philadelphia, Pa.

253. Brown Air-O-Line Controllers—This booklet will prove invaluable to the men in charge of dyeing, finishing and slashing, as well as the textile executive. 32 illustrated pages describing the various Brown Controllers. The Brown Instrument Co., Philadelphia, Pa.

257. Loom Motors—This 4-page folder describes the Louis Allis Loom Motor, which is designed and built from the ground up as a sturdy, smooth, powerful motor necessary for successful performance with modern high-speed looms. The Louis Allis Company, Milwaukee, Wisc.

258. Automatic Overhead Cleaner for Spinning, Winding, Warping and Twisting—24 page booklet showing the new American MonoRail automatic cleaner in operation on MonoRail track circut over Spinning, Warping, Winding, Twisting, etc. This cleaner incorporates a new scientifically designed blower producing a whirling column of air directed and controlled so that it prevents accumulation of fly with no harm to roving. The American MonoRail Company, Cleveland, Ohio.

259. Cotton Conditioning with Texspray Compound—18-page booklet describing the Texspray method of cotton conditioning. It has been proven that this method will save money, increase production, increase flexibility of fibre, eliminate static and reduce fly and dust. The Texas Company, New York, N. Y.

260. Lubrication—This attractive booklet contains valuable and interesting articles on loom lubrication and also on spinning design and the function of spindle oils. The Texas Company, New York, N. Y.

261. The Brown Moist-O-Graph—16 page booklet describing the Brown Moist-O-Graph which measures, records and controls the moisture content of cotton warp yarns. The Brown Instrument Company, Philadelphia, Pa.

264. American Pressed Steel Trucks—16 page illustrated catalog describing the American line of trucks and industrial truck wheels. American Pulley Co., Philadelphia, Pa.

266. Energy Drive—The Latest Improvement in the Art of Weaving—7-page illustrated booklet describing the sensational new energy drive for looms. Complete with specifications and actual installation results. Power Transmission Council, Inc., Boston, Massachusetts.

269. Stainless Steel Equipment for the Dyeing and Textile Industry—Attractive four-page folder describing the Blickman line of dyeing equipment. S. Blickman, Inc., Weehawken, N. J.

271. The New American Adjustable Diameter Wedgebelt Pulleys—illustrated leaflet describing the American adjustable diameter sheaves designed to produce the best performance in all types of V-belt driven textile machinery. American Pulley Co., Philadelphia, Pa.

272. Where to Buy Monel Metal Textile Equipment—Attractive booklet which lists the names and addresses of experienced fabricators of Monel Metal equipment for the textile mill. The International Nickel Company, Inc., 67 Wall St., New York, N. Y.

273. Debevoise Maintenance Paints—38-page illustrated manual describing and illustrating the Debevoise line of paints for industrial use. The manual features a complete line of paints for the interior and exterior of textile plants and mill villages. The Debevoise Company, 968 Grand St., Brooklyn, N. Y.

274. Card Sliver Drying Machine—attractive six-page folder describing and illustrating the new stenter card sliver drying machine. The machine is used for cotton sliver as well as rayon sliver. American Obermaier Corp., Long Island City, N. Y.

275. Vacuum Lint and Dust Collector—attractive folder describing the patented vacuum lint and dust collector for automatic spoolers, warpers nappers and textile machinery. The Textile Shop, Spartanburg, South Carolina.

276. Continuous Vulcanization of Transmission Belting—12-page booklet containing facts based on data assembled during the development of this new principle of belt manufacture and the performance of the product in actual service. Boston Woven Hose & Rubber Co., Cambridge, Mass.

277. Bulldog Rubber Tension Roll Covering—attractive four-page folder describing the new scientifically correct product designed for taking off all synthetic fabrics, natural silks and fine cotton goods. Boston Woven Hose & Rubber Company, Cambridge, Mass.

278. Textile Testing Laboratories—a 10-page illustrated booklet describing a modern textile testing laboratory and pointing out the necessity for laboratory air conditioning systems. Ask for bulletin 138. Parks-Cramer Co., Fitchburg, Mass., and Charlotte, North Carolina.

279. When Cleaning's Automatic, a Spinner's Free to Spin—a 10-page illustrated booklet dealing with the Parks automatic traveling cleaner. Ask for bulletin 1036. Parks-Cramer Co., Fitchburg, Mass., and Charlotte, N. C.

280. Why do they open Windows—a 10-page illustrated booklet which deals with the Parks automatic airchanger—a patented combination of forced air change and direct humidification in balance—all under control of automatic humidity regulators. Ask for bulletin 637. Parks-Cramer Co., Fitchburg, Mass., and Charlotte, N. C.

281. Sealed—Showing how dirt and dust shorten life and destroy accuracy of bearings and importance of sealed bearings to keep dirt out and to keep lubricants in. New Departure Division, General Motors Corp., Bristol, Conn.

282. Ra-Tox Ventilating Shades for Industrial Sash—Bulletin giving details on this and other extremely economical and efficient equipment. Hough Shade Corp., Industrial Shade Division, Janesville, Wisc.

283. Postal Guide and Envelope Catalog—Answers every question regarding mailing, postal and shipping rates. Atlanta Envelope Company, Atlanta, Ga.

284. Morton Nickel Iron Quick Opening Handle Gate Valve—Illustrated leaflet describing the new Morton Valve for dyeing machines, pipe lines, steam and water lines, boiler blower valves and throttle valves. Morton Machine Works, Columbus, Georgia.

285. An Unusual Unit of Equipment—Attractive folder describing and illustrating the Moccasin principle of oil distribution. Moccasin Bushing Co., Chattanooga, Tenn.

286. Tricon W-30—Study of wetting agents and their activity with recommendations for textile processing. Rohm & Haas Co., Philadelphia, Pa.

287. New American Pulley Motor Base Catalog—an attractive new illustrated catalog describing in detail construction and application of new tension control motor base. Includes data comparing performance of drives with and without tension control motor base and applications are shown for both flat and v-belt drives. American Pulley Co., Philadelphia, Pa.

288. Nopco Softeners and Wax Finishes—14 page booklet describing the various Nopco Products for finishers of cotton goods. National Oil Products Co.., Harrison, N. J.

289. Caustic Soda Bulletin—a data and reference book designed for the user of caustic soda. Complete with charts, drafts and formulas. Pennsylvania Salt Mfg. Co., Philadelphia, Pa.

290. Hyatt Roller Bearings on Textile Machinery of All Kinds—34 page booklet which describes and illustrates how Hyatt bearings are being applied to textile Machinery. Hyatt Bearings Division, Newark, New Jersey.

291. Wolf Products for the Textile Trade—Illustrated booklet describing the Wolf line of chemicals for the printing, dyeing, sizing and finishing of all textile fabrics. Jacques Wolf & Co., Passaic, N. J.

292. A New Mildew-Proof Mill White—Illustrated folder describing the newest development in mill paint. Textile mills, operating under conditions of high heat and high humidity, can do away with the problem of mildew by using this new mildew-proof mill white. The Billings-Chapin Company, Cleveland, Ohio.

11. Whitinsville Rings—16 page illustrated booklet describing ring manufacture, measurements, types, uses. How to determine flange sizes. By Whitinsville Spinning Ring Co., Whitinsville, Mass.

29. Continuous Card Stripper—A 20 page booklet describing in detail continuous card strippers, their advantages, the power required to operate, etc. Saco-Lowell Shops, 147 Milk St., Boston, Mass.

30. Lubrication of Textile Machinery—32 pages illustrated. Data covering the economical lubrication of all textile machines. New York & New Jersey Lubricant Co., 292 Madison Ave., New York, N. Y.

38. Sleaziness in Full Fashioned Knitting—Illustrated survey with samples of fabric showing causes of sleaziness and methods to be employed in eliminating it.—By Textile Machine Works, Reading, Pa. (This company also issues parts catalog for Reading full fashioned machines with general information on subject of full-fashioned knitting.)

55. Interpretation of Analysis for the Layman—An eight page booklet explaining what the various items used in fatty oil and sulfonated oil analysis

CONTINUED ON PAGE 138

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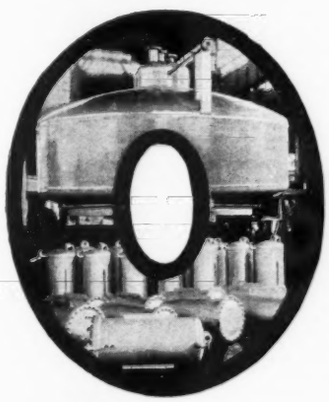

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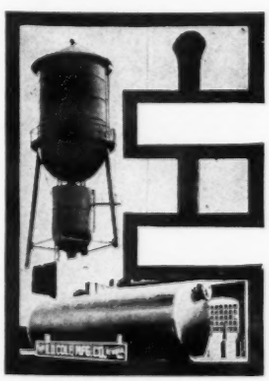

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SOILED, SNARLED WHIPPED, or RUBBED
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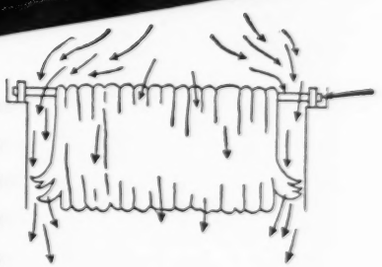
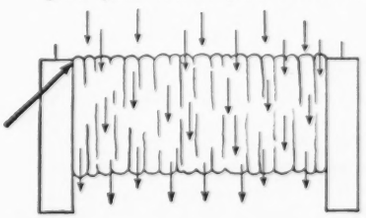


Damage to the yarn while being conveyed and dried, (like that shown in illustration at the right), is prevented by the unique Traveling Skein Protector (as shown at left below), a patented feature of the modern Proctor Automatic Yarn Dryer, which gives you just what you want in quality, quantity and low cost of operation. Descriptive catalog will be sent you free on request.



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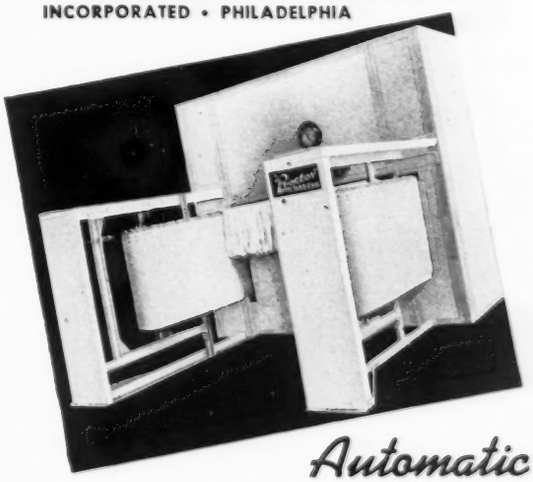

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YARN DRYER

HELPFUL BOOKLETS FREE...

Continued from Page 130

mean, enabling the ordinary textile man without chemical education to interpret the various chemical analyses. National Oil Products Co., Harrison, N. J.

62. Rubber Products for the Textile Industry—A 40 page booklet giving a wealth of information on the proper selection, installation and operation of rubber belts, together with charts, showing horsepower rating, pulley sizes, V-belt sizes, also information on all types of hose and rubber covered rolls used in the textile industry. Manhattan Rubber Mfg. Division of Raybestos-Manhattan, Inc., Passaic, N. J.

64. SKF in the Cotton Mills—A twelve-page booklet showing the advantages in power consumption, increased production, savings in lubrication, increased yarn breakage strength to be secured through roller bearing spindles. SKF Industries, Inc., Front St. and Erie Ave., Philadelphia, Pa.

65. Bulletin No. 500. Cooper-Hewitt Industrial Illumination—booklet explaining in detail the importance of good lighting and the necessity of proper quality as well as proper quantity of light. General Electric Vapor Lamp Co., Hoboken, N. J.

70. Fafnir Ball Bearings for One Process Pickers—outlining the advantages of ball bearings in guaranteeing smooth, accurate motion, particularly on eveners, as well as uninterrupted production, ease of operation and cleanliness of bearing units throughout the one-process pickers. Fafnir Bearing Company. New Britain, Conn.

72. The Merrow Butted Seam—A 16-page booklet defining and illustrating the Butted seam, describing its properties and outlining some of the advantages to be gained by its use in Textile fabrics. The Merrow Machine Co., Hartford, Conn.

77. Bulletin S 200—Illustrating and describing the new Reeves Variable Speed Drive for spinning and twister frames, explaining its many distinct advantages and giving charted results of exacting tests. Reeves Pulley Company, Columbus, Indiana.

88. Dayton Cog Belt Catalog—A 32 page booklet full of vital information on power drives, plainly and simply assembled and arranged so that anyone can select the proper standard drive for any condition. It also provides data for the calculation of drives where acquired. The Dayton Rubber Mfg. Co., Dept. C-11, Dayton, Ohio.

94. New Development by Onyx—Eight page booklet describing and giving uses of new developments in sulphonated aliphatic compounds . . . called Aliphatic Ester Sulphate and Glyceryl Sulphates. Onyx Oil & Chemical Co., 15 Exchange Place, Jersey City, N. J.

106. Cotton System Warp Sizing on Multiple Cylinder Machines—a folder showing the advantages of this type of machine in making warps of acetate and other synthetic yarns and spun silk. Charles B. Johnson, Paterson, N. J.

107. Complete Information on Alemite Lubrication—Showing how costs can be reduced through proper lubrication. Alemite Corp., 1828 Diversey Blvd., Chicago, Ill.

109. Some Properties of Starch and Dextrine—Explaining certain fundamental properties of starch and its derivatives and their action when heated and agitated. Stein, Hall & Co., 285 Madison Ave., New York City, N. Y.

110. 3-in-One Oil for Industrial Uses—showing the many industrial uses and advantages of this oil. A. S. Boyle Co., 1934 Dana St., Cincinnati, Ohio.

116. Arcy—Telling in an interesting way the story of Arcy, which completely liquefies ordinary thick boiling pearl starch, and its many advantages. Drake Corporation, Norfolk, Va.

117. Anti-Friction Bearings as Applied to Spinning, Drawing and Twisting Frames—This bulletin shows with detailed drawings how a simplified design of roller bearing applications is made to replace the plain babbitt bearings and lists the advantages that are gained. It deals primarily with better continuous production and in consequence freedom from equipment care and repairs. Hyatt Roller Bearing Co., P. O. Box 476, Newark, N. J.

119. The World's Finest Sewing Machines—a condensed catalog giving details of the various Willcox & Gibbs sewing machines. Willcox & Gibbs Sewing Machine Co., 658 Broadway, New York, N. Y.

120. Goodyear Mechanical Rubber Goods Catalog—40 page catalog giving practical information and tables helpful in the selection of the proper belting, hose or packing to suit the requirements of the mill. Goodyear Tire & Rubber Co., Akron, Ohio.

122. Water Filters and Filtration Equipment—Containing complete description of the chemical processes involved in the coagulation and precipitation of foreign matter, the removal of iron, oil, manganese, from water and the production of clean water suitable for the textile industry, together with tables of specifications for standard filters, and information showing the extra profits to be made by the mill through reduction in costs and process difficulties, through removal of undesirable impurities in water. Permutit Company, 330 W. 42nd St., New York, New York.

128. Houghton's Hand Book for the Hosiery Dyer—This book contains the result of 69 years of experience in research and development of processing materials for the textile industries, together with a wealth of other data useful to every hosiery dyer. E. F. Houghton & Co., 240 W. Somerset St., Philadelphia, Pa.

130. Three New Textile Scouring Agents—This 32-page book gives many valuable formulas for the use of Houghton's Wonder Powder—a new type of colloidal detergent—in fulling, scouring and finishing nearly all types of woven and knit goods. Also contains several pages of valuable reference and conversion tables. E. F. Houghton & Co., 240 W. Somerset St., Philadelphia, Pa.

134. STA-PUT Lubricants—A brief description of an entirely new line of tough film lubricants which not only gives greater protection to bearings but eliminates oil drip and reduces lubrication costs. STA-PUT Lubricants are made in grades to suit all types of textile machinery. E. F. Houghton & Co., 240 W. Somerset St., Philadelphia, Pa.

139. Textile Detergents—Theory of the use of alkalis and control of pH—This 32 page booklet explains in simplified manner for the benefit of the layman the chemical processes that take place in using textile detergent in the finishing of textile goods. It contains many useful tables and data. Detergent Products Corp., Peachtree Bldg., Atlanta, Ga.

141. V-Belt Engineering Data Book—Over 50 pages of pertinent engineering information including data on selecting a V-belt drive design of special V-belt drives, numerous standard tables, charts and belt and sheaves list prices. Manhattan Rubber Manufacturing Div. of Raybestos-Manhattan, Inc., Passaic, N. J.

152. Plant Checkup List—Crane Co., 836 South Michigan Ave., Chicago, Ill.

154. Johnson Bronze Bulletin No. 340—showing over 600 sizes Johnson general purpose bronze bushings. Johnson Bronze Co., New Castle, Pa.

155. Link-Belt Catalog 1574 on the P. I. V. Gear—giving details of this positive variable speed control. Link-Belt Co., 307 N. Michigan Ave., Chicago, Illinois.

156. Link-Belt Engineering Data Book No. 125—showing features and giving engineering data on Link-Belt silent chain drive. Link-Belt Co., 307 N. Michigan Ave., Chicago, Ill.

157. Grading Rules and Complete Specifications for Laying and Finishing Maple Floors—Maple Flooring Manufacturers Association, 1794 McCormick Bldg., Chicago, Ill.

163. Roto-Koner—Bulletin describing the new No. 44 Universal Winder, known as the Roto-Koner for winding knitting yarns, which has many new and distinctive features. Universal Winding Company, P. O. Box 1605, Providence, R. I.

164. Johnson Rotary Pressure Joints—Bulletin describing the rotary pressure joint which requires no packing, no lubrication and no adjustment, giving installation and maintenance instructions, types, sizes, dimensions and prices. The Johnson Corp., Three Rivers, Mich.

166. Precision Winding—An interesting 30 page booklet on rayon yarns and winding, designed for weaving and finishing mills using silk and rayon. Universal Winding Co., P. O. Box 1605, Providence, Rhode Island.

168. The Tube-Tex for Tubular Knit Goods—Bulletin describing this modern machine which extracts, processes, dries, conditions and folds in one continuous operation, lowering costs, saving labor, power, space and waste. H. W. Butterworth & Sons Co., York and Cedar Sts., Philadelphia, Pa.

170. Gates Textile Accessories—showing the increased efficiency and economy to be secured through the use of Gates cone belts, evener belts, card bands and loom binder cushions. The Gates Rubber Company, Denver, Colo.

171. Design of V-Belt Drives—48 page booklet full of valuable tables and data showing the type, number and design of V-belts that will give the greatest efficiency on each particular drive. The Gates Rubber Company, Denver, Colorado.

176. Sonoco Products—A 60 page illustrated booklet giving descriptions, specifications and charts of the many Sonoco products, including bobbins, cones, tubes, cork cots, roving cans, spools, rolls, etc. Sonoco Products Co., Hartsville, S. C.

180. These Extra Cushion Cork Cots Offer Six New Advantages—a 6-page folder which tells the story of the new Armstrong Extra Cushion Seamless Cork Cot from the viewpoint of the mill man. The folder describes HOW the new cot is of advantage to mills spinning cotton yarn; WHY it is better, and something about the method of manufacture, and also gives PROOF in the form of some tests that have been made with this new roll covering material. Armstrong Cork Products Co., Textile Division, 960 Arch St., Lancaster, Pa.

183. Schieren-izing—describing leather belt manufacture from the selection of hides through the various processes to the final tests, also showing illustrations of belts with unusually long service lives. Chas. A. Schieren Co., 31 Ferry St., New York, New York.

184. Speed Control Handbook T-35—new reference book in variable speed control, said to be the most complete and helpful book on this subject ever published, 112 pages and more than 200 illustrations of interest to every production executive, purchasing agent, superintendent, overseer and master mechanic. Reeves Pulley Co., Columbus, Ind.

185. Dulux—The White Finish That Stays White—New book describing the new ten-point finish for factory walls and ceilings, the finish that stays whiter, stays cleaner and stands repeated washings. E. I. du Pont de Nemours & Co., Finishes Division, Wilmington, Del.

186. F-7 Feeder Bulletin — Describing the better blending that is secured and the important cleaning operation that is added by using F-7 feeders in place of bale breakers. Saco-Lowell Shops, 147 Milk St., Boston, Mass.

187. The Wildman Single-Head Full-Fashioned Hosiery Machine—Literature on request from the Wildman Mfg. Co., Full Fashioned Division, Norristown, Pa.

188. Form 374—This form enables you to gather your own cost data on your sewing machines and determine whether new Union Special Machines will show big savings. Furnished free by Union Special Machine Co., 400 No. Franklin St., Chicago, Ill.

190. Warp Conditioning Units for Synthetic Yarn Slasher—booklet giving full details will be sent free to mill men who write on their company letterhead. Chas. B. Johnson Co., Paterson, N. J.

191. The Bahnson Humidifier—bulletin describing Bahnson Humiduct system which combines humidifying, heating, ventilating and air conditioning all in one unit, will be sent free on request. The Bahnson Co., Winston-Salem, N. C.

198. The Perfect Loom Let-Off—Folder pointing out the advantages of the new asbestos friction loom let-off and giving specifications and price list. Fiber Mfg. Co., Newton, N. C.

COTTON, Grant Bldg., Atlanta, Ga.

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KNITTING SECTION

EDITORIAL FEATURES:

Hosiery Industry Effectively Served by Its National Association, by Earl Constantine 141

"Trade Associations Preserve Business Integrity"—a Discussion of the Underwear Institute, by Roy A. Cheney 143

The Outerwear Industry, by Harold R. Lhowe 145

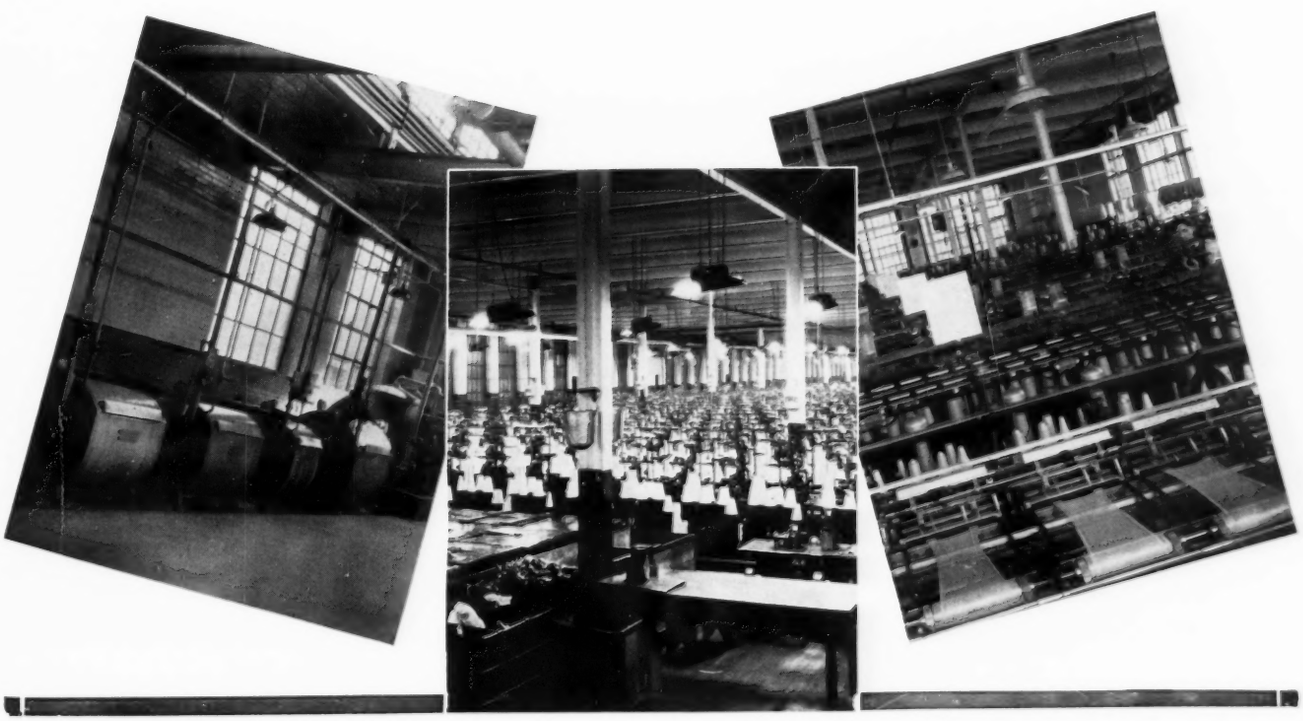
Southern Hosiery Mills Have a Young but Profitable Trade Organization, by P. W. Eshelman 146

Report of the Knitting Exhibition and Convention in Philadelphia 147

Trends and Highlights in the Knit Goods Markets 155

An Eye on the Knitting Mills 165

Review of the Yarn Markets 166



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Hosiery Industry Effectively Served by Its National Association

By EARL CONSTANTINE

President, National Association of Hosiery Manufacturers

THE FIVE more important textile industries in this country are cotton, wool, hosiery, underwear and outerwear. Like many other industries, for whose products there was unusual demand during the World War, they all experienced marked expansion of productive capacity, and since then have found themselves able to supply much more than current demand, with resulting keen competition and relatively weak price structures.

The hosiery industry faced an unusual problem during the 1920s resulting from a sudden pronounced shift of demand from ladies' seamless hosiery to ladies' full-fashioned hosiery. As late as the early '20s 75 per cent of the domestic demand for ladies hosiery was for the seamless product with only 25 per cent for the full-fashioned. Within less than 10 years this situation reversed itself. One of the consequences was to accentuate the over-capacity of seamless production while at the same time creating a stampede in the direction of full-fashioned installations which brought about an over-capacity of that type of equipment as well. Added to the situation just described has been a shift of equipment from North to South accompanied by the opening up of quite a few new southern operations with new capital and new management. This last development has been particularly pronounced during the years 1936-1937.

Many of the new operations which were started in the late '20s were inadequately financed and lacked adequate working capital. Before such operations had overcome these shortcomings the depression arrived and aggravated their condition. Some companies have been compelled to liquidate, others have reorganized, and still others are struggling under difficulties.

The hosiery industry is not a highly integrated industry. There are about 800 companies of which less than 100 could be described as large companies. Obviously the competition within the industry is keen. Also, under the described conditions the problems of merchandising are acute, and many plants sell through agents and are not equipped to do their own merchandising.

During the last six years in particular the National Association of Hosery Manufacturers has regarded its major task to be that of dealing with the fundamental weaknesses and problems of the industry and thus working in the direction of rehabilitating it as a whole, and restoring its operations to a reasonably profitable basis. The all-essential foundation for co-operation within an industry is contact, understanding and mutual confidence between managements and executives. Big progress along this line has been made through a multiplicity of conferences and meetings of various sizes, groups and characters. Slowly but surely the industry gives evidence that it understands the fact that the fortunes of every member of the industry are affected more or less by the fortunes of the industry as a whole. At all times a survey of an industry reveals enough weaknesses and difficulties to discourage one, but an examination of the progress made by the hosiery industry during the last five years in particular shows much progress and gives much encouragement for further progress.

The Statistical Services

Among the things which have been accomplished one may mention the establishment of an excellent and effective statistical service which has served to hold production and stocks generally in line with demand. This same service has made it possible for the industry to deal with its problems more accurately and intelligently and to present its case before public bodies effectively. Its self-

Blank & Stoller photo

EARL CONSTANTINE, president of the hosiery association

• *A. H. Carr, of Durham Hosiery Mills, Durham, N. C., is chairman of the National Association of Hosiery Manufacturers, of which Mr. Constantine is the new president. R. O. Huffmann, of Morganton (N. C.) Hosiery Mills, and Roy E. Tilles, Gotham Silk Hosiery Co., New York City, are vice-chairmen; Ernest Blood is treasurer; and Reuben C. Ball is secretary. Executive offices are at 468 Fourth Avenue, New York City.*

government under its recent code was of a high order with resulting benefits which are still felt in the industry. Material progress has been made in developing sound principles and methods of costing and in improving the practice of the industry as a whole. Costs of operation generally have been brought down to correct levels. The industry is paying increasing attention to its merchandising problems and is improving its methods of selling. During recent months a merchandising division has been created by the National Association of Hosiery Manufacturers consisting of the sales executives and selling agents of the industry. This is a healthy move in the right direction, and given reasonable time will produce much good fruit.

Industry-wide Planning

The industry is showing more and more its ability to adjust itself to changing demands. There are more such changes taking place constantly than the average person would note. Among these could be mentioned the substantial elimination during recent years of the use of any cotton in ladies' full-fashioned hosiery, most of the product now being all silk. In the same branch the tendency towards sheerer products has continued steadily. A demand has developed for knee-length stockings for which a good market exists as long as skirts do not become too short. The demand for ribbed goods has dropped steadily during recent years but this has been offset by increased demand for anklets of all types. In the half-hose branch there has come in a widespread use of elastic tops of different kinds. The present season sees iridescent colors in ladies' silk stockings. Men's hosiery moves more and more in the direction of pattern and color. These serve to illustrate the type of changes in demand which constantly face the industry.

The prime function of a national trade association is to do an industry-wide planning job. Each plant does its own best planning for the present and the future. But who shall do their joint planning as an industry if not those who compose its national association and those who direct it? An industry, even as an individual or as a single corporation, must have positive leadership and must be headed in definite directions. This is the prime function of the national association of an industry. The whole-hearted and ample support of a national association both financially and cooperatively is plain good smart business. If one should question this let him imagine his industry attempting to deal with its industry-wide problems, whether they come from government, the consumer or elsewhere. Nothing but chaos would exist. As it is, the national trade organization is alert about everything that is or may affect the industry and it moves promptly to defend or to advance the interest of the industry. It assembles the right people on a given problem, it works out a practical solution and it carries forward that solution to a conclusive end. It must be apparent that it isn't the everyday direct service of the association which are its most important value, as it is its readiness-to-serve at all times whenever a new situation or problem presents itself.

In view of this fact an efficient national trade body furnishes its industry a form of invaluable insurance, that whatever storm may hit it an instrument is ready to protect it. The dues which a manufacturer pays are the premium on such insurance. Such premium should be paid as regularly, promptly and gladly as the premiums on any other insurance policy. Whether business be good or bad a company maintains its fire insurance policy in good standing. It is just as good business to maintain its trade association insurance in good standing. The value of an association depends in part on the resources made available to it and in part on what the manufacturers put into it and the cooperation they extend to it.

Southern Hosiery Mfrs. Ass'n

(Continued from page 146.)

sociation that ordinarily escapes notice. For example, our association bulletin usually has a list of equipment for sale by members and also a list of equipment desired. Many members probably never make use of this service yet it has a distinct value to those who avail themselves of it. If the bulletins of our association are scruitinized for a period of a year, many items will be found that may not interest every member of the association but to some particular group they are a valuable source of information.

One other activity of our association is our annual meeting. This gathering, of necessity, involves the discussion of pressing problems, the establishment of policies and election of officers and directors but aside from these functions, I personally receive much benefit through casual contacts. By this I mean: perhaps an informal discussion of some unique and novel innovation or a suggestion as to the handling of some phase of the Social Security requirements that had never occurred to me. The result of contacts of this nature are, more or less, intangible but without question they are beneficial. There is an exchange of ideas and thoughts that could not possibly be cleared through the association office.

In the beginning I mentioned that the trade association is accepted as a permanent institution in America today and the report of the executive secretary of the Southern Hosiery Manufacturers' Association for the year 1937 substantiates this statement so far as the southern segment of the industry is concerned. Our association ended the year with the largest membership recorded since inception and a very favorable strengthening of the financial condition. Also there have been several new memberships since the end of last year.

"Trade Associations Preserve Business Integrity"

A Discussion of the Activities of the Underwear Institute . . .

By ROY A. CHENEY, Managing Director

THE EVENTS of the past four or five years have given manufacturers more need for a national trade association than in any other period in our industrial history. NRA and subsequent labor regulations, AAA processing taxes, reciprocal trade agreements drawn by the State Department, and fiber marking requirements promulgated by the Federal Trade Commission, are just a few of the "headaches" which textile manufacturers have suffered in that time. Except for a very few of the most rugged individualists, manufacturers have been able to digest the significance of such measures and to make the necessary adjustments only in co-operation with their fellow manufacturers. The great body of industrial executives have found that, as Donald Richberg puts it, "the integrity of small business enterprises is preserved by their trade associations." A review of Underwear Institute activities of the past year alone demonstrates how certainly that is true.

Legislative Achievements

Wage-and-hour legislation was one of the outstanding themes of 1937. The overwhelming re-election of the New Deal augured such legislation and only the tie-up over the Supreme Court Bill prevented its earlier enactment. During the year the Institute was called on to prepare briefs dealing with wage-and-hour legislation, and to appear with committees from the industry before the Congressional committees dealing with the Ellenbogen Bill and the Black-Connery Bill, also before the Walsh-Healey Public Contracts Board. Manufacturers who served on those committees for the first time expressed their surprise and appreciation of the amount of work involved and the value of being represented by their trade association on these occasions.

Distinguishing the work of the Underwear Institute and its industry committee before the *Walsh-Healey Public Contracts Board*, it is to be noted that for about a year we were the only trade association to procure from the Board a concession to the principle of wage differentials recognizing differences in manufacturing costs.

Another very important activity of the past year was in connection with *taxes—windfall, floor stock, social security, business privilege, undistributed profits*, and whatnot else. Many thousands of dollars have been saved for Institute members by information which we procured and the representations which we made before appropriate tax agencies. In one case alone, a mill had filed its claim for refund of floor stock taxes on cotton goods just a day or so too late. We were able to reinstate the claim by virtue of our special knowledge and Washington contacts, thereby saving that one mill over $10,000.

Bachrach photo
ROY A. CHENEY

Fiber identification was a prominent demand of the Federal Government in the past year and is now in full flourish. During the first session of the 75th Congress, several truth-in-fabric bills were presented and necessitated the appearance of the Institute in behalf of its membership. More recently have been the rayon, silk and wool trade practice rules formulated by the Federal Trade Commission, which make it necessary to identify these fiber contents in all textiles and textile products. The Institute promptly collaborated with the Wholesale Dry Goods Institute and the National Retail Dry Goods Association so as to procure an advantageous understanding with the distributor groups as to the most effective and most economic form of labeling.

On the score of *fair trade practices* within the industry, the Institute submitted to the Federal Trade Commission rules for truth in the labeling of combed yarn merchandise, shrinkage properties of underwear, and the presence of weighting in underwear fabrics. These rules should be approved by the Commission in the near future, and will improve competitive standards in the trade.

Important on the side of *distribution* in the past year have been the Federal and the 42 State laws permitting manufacturers to draw contracts with their distributors for the maintenance of resale prices. The Institute has assembled a library of all of the state laws, as well as the Federal, and

● *Officers of the Underwear Institute, besides Mr. Cheney, the managing director, are: Ralph M. Jones, Utica (N. Y.) Knitting Co., president; Grover C. Good, Globe Knitting Works, Grand Rapids, Mich., 1st vice-president; Walter W. Moyer, Moyer Underwear Mill, Ephrata, Pa., 2nd vice-president; Oscar W. Gridley, Utica (N. Y.) Knitting Co., treasurer. Headquarters are at 2 Park Avenue, New York City.*

various literature analyzing the laws, contracts and other phases of application of this legislation. An important survey of underwear distribution was reported by the Institute in 1937.

Aid to Industrial Mills

In various instances we have been called upon to *aid certain sections of our industry.* Recently we have collaborated with Pennsylvania member mills to procure certain adjustments to the statewide 44-hour work week. Some time ago the Institute challenged and finally offset claims by the State of Oklahoma on a number of our manufacturers for taxes on business done with companies in that state. A similar measure was passed by the Federal Congress for the District of Columbia. In that case we could not challenge the right of the legislative body to regulate interstate commerce but we have been of assistance to many of our member manufacturers in meeting the business privilege and business license tax requirements.

The *statistical and research facilities* of the Institute have been brought to bear most importantly in connection with wage and hour briefs, the *reciprocal trade agreements* being drawn by the State Department, and, more recently, to a very good effect, with regard to the extent and degree of curtailment in our industry necessitated by the recent business recession. These timely surveys have been granted widespread co-operation by our manufacturers with the result that we are able to aid materially in the formation of business policies at important moments.

Climaxing a year of active use of the industry's statistical services, is a current revision of "Business-Building Facts," first issued a year ago and found so helpful in the Walsh-Healey, Ellenbogen, Black-Connery, and other Government hearings. This publication and the Institute's statistical program were awarded the Certificate of Recognition for outstanding trade association work in 1936, recently bestowed by U. S. Secretary of Commerce Daniel C. Roper in behalf of American Trade Association Executives.

In addition to these services, which should be sufficient to establish the indispensability of the Institute and the reason for every mill in the industry supporting it, there have been scores of *special surveys made at the instance of certain garment groups, certain regions, or because of certain special problems.* Very important in the past year's accomplishments has been a survey of occupational wages which proved of inestimable aid to many mills which needed a factual background for dealing with labor organizations.

To Unions: $80,000; to Trade Association: $8,000

Incidentally, seven of our underwear mills which have the check-off system, check off annually to labor unions some $80,000, whereas the dues of these same companies to the Institute are about $8,000. This illustrates the organized strength which the manufacturers' own organization is up against. One textile union recently disclosed an annual income of some five million dollars, beside which manufacturers' trade association budgets pale into insignificance.

During the past year manufacturing cost surveys were completed on women's lightweight cotton union suits and women's fabric dress gloves. Other studies were made of the effectiveness of various types of mill lighting; the amount of waste involved in underwear manufacturing operations; progress in the manufacture of artificial wools; the use of stainless oil in underwear mills; night work wage premiums; and classification of underwear distribution expenses.

In connection with *labor matters* it is important to note that the Institute's industrial counselor has been extremely helpful in solving the problems of a number of underwear mills. The regular collection service of the Institute has also continued its very useful functions.

There are few activities of the Institute indeed which do not have a vitally important bearing on every mill in the industry. Achievements of the past year reflect the Institute as a powerful and effective force in shaping national business policies, in view of which every mill executive in the industry should ask himself: "Can I conscientiously deny the need for a strong national trade association? Could there be such an association if every mill followed my example? Am I setting the proper example by supporting my national trade association, and, if not, why not?"

Ross Launches Program for Broader Knit-goods Uses

Lester J. Ross, vice-president, The Torrington Co., Torrington, Conn., long identified with the knitting industry of the United States and Canada, has initiated an effort to interest knitting manufacturers and allied concerns in the development of broader and newer fields for knitted products.

During the Knitting Arts Exhibition in Philadelphia last month, Mr. Ross devoted a great deal of the week to the promotion of the idea. He had accumulated an extensive list of samples of new and unusual knitted products, both latch needle and spring needle work, and products of flat machines, and was demonstrating these as possible opportunities for more extensive applications of knit-goods.

Some of the unusual knitted products displayed included knitted covering for electrical wiring; drapery cloths, upholstery, curtain materials, etc.

Mr. Ross expressed the feeling that the knitting industry, like all old established industries, is prone to follow too much the staple, standard lines, whereas much new business may be uncovered, and new profit sources established, in the development of newer fields of use. He cited the experience of other industries in devising new outlets, and recommended research, ingenuity and experiment in further developing new markets for knit-goods.

The Outerwear Industry

By HAROLD R. LHOWE

Executive Director and Counsel, The National Knitted Outerwear Association . . . .

THE National Knitted Outerwear Association has just celebrated its 20th birthday. It was called into existence in response to the need for a medium through which the industry could co-operate with the War Industries Board. That was in 1918. But the industry's tradition of co-operation extends further back than that year. The original beginnings of the Association may be traced back to 1908 when predecessor organizations first took shape.

In its history since that time, there are few fields of collective activity the organization has not touched. Its functions can generally be divided into two types: those which are beneficial in a general sense to the entire industry as a whole, and those which are individual services to its members, such as handling of individual collection claims, adjustments with customers, arbitrations and the furnishing of information and advice.

Of course, all of these are important, but it is the first of these that I deem most important. The trade association today is the means whereby a whole industry may raise its voice in the halls of government and in other councils where the individual standing alone is not heard. That role of the trade association is becoming increasingly important. Today, when so many new legislative proposals are put forth involving alterations in the business life of the country, the job of keeping abreast of developments and of representing the interests affected, is a mighty one. The average business man, in his individual capacity, cannot do it alone. He can only do it through the organization of groups of individuals whose interests are similar to his.

Since the days of co-operation with the War Industries Board, the National Knitted Outerwear Association has been the frequent means of communication between the industry and our government. In 1933 the Association prepared the code which NRA adopted. It has formulated rules of fair trade practice approved by the Federal Trade Commission. It has sought to shield the industry from threats of foreign competition by making vigorous protest to the Committee for Reciprocity Information with respect to the pending British tariff treaty, as well as in several treaties previously negotiated.

But a trade association should be more than a mere mouthpiece to government. So far as concerns the internal management of the industry's affairs, it should be the great gospeler of good practice and sound principle. A trade association is the conscience and teacher of an industry. That deserves to be stated as its chief office.

This educational function has been performed in the knitted outerwear industry incessantly. It has disseminated information on sound rules of cost accounting; and it has done so in an effort to protect the market from unfair price demoralization. It has formulated canons of fair play independently of government codes and Federal Trade Commission rulings and it has set them up as standards of fair conduct to which the far-seeing men in the industry could rally. It has been effective to a great extent in providing for standards which, though without legal enforceability, rest upon the good faith and public opinion in the industry.

So far as concerns our relationship with the distributors and retailers to whom we sell our products, and the consumer, the Association has also performed its service. We have had publicity campaigns to enlarge our market and spur our sales. We have worked with trade units in allied fields with a view toward improving the relationship between retailers and their outerwear resources.

Much ground has been covered. I believe that the greater work of this trade association lies ahead. The knitted outerwear industry is passing through a changeful period; and that is probably true of all industry. Production techniques are being modified, industrial relations altered. There is no manufacturer in the country today who does not feel that he is on new and unfamiliar frontiers. And there is no better way of meeting the new problems than by resort to mutual consultations and by drawing on the collective intelligence of an industry. To make possible such an approach to new solutions is a major duty of the trade association today; and to the extent that it succeeds in helping us develop our own solutions, we shall be free from interference from without.

HAROLD R. LHOWE, director of the outerwear association . . .

Southern Hosiery Mills Have a Young but Profitable Trade Organization

By P. W. ESHELMAN

President, Southern Hosiery Manufacturers Association; president, Wilkes Hosiery Mills Company, North Wilkesboro, N. C. . . .

THAT the trade association is a permanent institution in American industry today, I believe, is a generally accepted fact, and this condition must have resulted from such associations having been definitely beneficial and helpful to their particular industry or some segment of that industry.

The Southern Hosiery Manufacturers' Association has, in my opinion, run true to form in this respect. To dwell at any length on the problems our association has considered in the last few months is impossible in the space allotted but brief mention should give some idea as to their scope and the thought and effort expended by our executive secretary in collecting information concerning the problem at hand, condensing this information into a reliable, clear and concise resume and getting that information to all members at the earliest possible moment. And here it is appropriate to mention that the executive or managing secretary is the main spring of any trade association. A strong group of officers and directors is, without a doubt, invaluable to the secretary but they, obviously, must give the bulk of their time to their own business. Our executive secretary, Mr. Taylor Durham, is doing commendable work and in saying this I am confident that I am speaking for the association as a whole.

Some of the problems and activities of the association during recent months are here commented upon without attempting to present them in the order of their importance.

Royalty claims of the Elastic Patents Company necessitated clarifying bulletins to all members by the executive secretary and conferences between representatives of the company and association committee members. The result was an amicable and satisfactory settlement of differences.

Much time and effort has been spent on the rayon marking rules promulgated by the Federal Trade Commission and at this writing the problem is yet unsettled but negotiations with that body tend toward an early termination.

Allied News photo
P. W. ESHELMAN

• *With Mr. Eshelman as president, the Southern Hosiery Manufacturers' Association has two vice-presidents: one, who is chairman of the seamless division—T. Floyd Dooley, Johnson City, Tenn.; and another, who is chairman of the full-fashioned division—J. H. McEwen, Burlington, N. C. Fritz Seifart, of Charlotte, is treasurer; and Taylor R. Durham is executive secretary with headquarters at 1217 First National Bank Bldg., Charlotte, N. C.*

Taxes of every description have resulted in numerous bulletins from the executive secretary, calling attention to objectionable features, making clear obscure points and advising protest prior to legislative action. Results cannot be measured but in concerted effort with other associations there can be no question that favorable results ensued.

Proposed legislation, which, if it had become law would have been disastrous, received timely attention from the association and while this association cannot take sole credit for preventing enactment, it did, in co-operation with other groups have sufficient influence to prevent passage.

Imports of Japanese hosiery received attention commensurate to the importance of the question through the medium of bulletins, conferences and attendance at hearings of the United States Tariff Commission. The result has been revision of quotas definitely more favorable to the American hosiery industry.

With particular reference to the preceding paragraphs dealing with rayon marking rules and Japanese imports it is not to be assumed that the southern association takes full credit. On these problems, as on many others, our association has worked in co-operation with the National Association of Hosiery Manufacturers and their part in obtaining our objectives cannot be minimized.

The foregoing deals with specific problems, some of which affect only the hosiery industry, while others have a bearing on industry in general and are matters for consideration for every trade association. These are, of course, of extreme importance, but I believe that there is a great deal of benefit derived from an active as-

(Continued on page 142.)

34th Knitting Show is Great Success

THE 1938 Knitting Arts Exhibition is over, and comments from both mill men and exhibitors can only sum it up as being great. Long after the exhibition booths are removed and the visiting mill men have hung up their souvenir walking canes, contacts made at the show will be followed up and the information on various machines and supplies will be digested. The exhibition ran through April 25-29 in Commercial Museum, Philadelphia, and, as usual, proved to be the focal point of the knitting industry. According to Albert C. Rau, manager of the exhibition, all attendance records were broken, both in the number of exhibitors showing products or having booths for helpful contacts, and in the number of visiting mill men. A spirit of genuine interest was prevalent throughout the show, the mill men tending more and more each year to come to the exhibition with the definite purpose of learning, having discovered that treating the show with an attitude of entertainment is pure economic folly. Proof that the show is most helpful to all concerned is evidenced by the fact that this year the exhibition space was sold out well in advance, and that many new exhibitors have already reserved space for next year and old exhibitors have requested increased space.

Taken as a whole, the exhibition was the best yet, both in the individual arrayment or showmanship of the booths and in the further advanced and improved machinery and accessories shown. There is no doubt of the direct benefits derived from attendance at the exhibition, besides the intangible effect on both mill men and exhibitors in meeting each other on a different basis once a year.

High points of the show were meetings of the organizations. On Tuesday, April 26, the National Association of Hosiery Manufacturers held the annual meeting, at which Austin H. Carr, president, Durham (N. C.) Hosiery Mills, was elected to the newly-created post of chairman of the board, and Earl Constantine, formerly managing director, was elected president. Wednesday, April 27, saw a hearing on the proposed fair trade practice rules for hosiery, and Thursday, April 28, there was the annual meeting of the Underwear Institute. More complete reports of all meetings appear on page 153 of this issue.

Some Highlights and New Developments Seen at the 34th Annual Show

At the show, booths were maintained by many companies having no exhibits, but at which company representatives were always in attendance to make contacts, offer services, and greet old and new friends. Among these booths were those of publishers, lubricating companies, yarn suppliers, and associations. Representatives of ring traveler companies were present, one booth being equipped with a short twister and another with a Strobotac, each representative of the latter company having this piece of equipment as part of his traveling kit. An interesting booth by a rayon company was a marionette show, offered at intervals each day.

The Knitting Machine Exhibits

As usual, the running machines were the center of interest. The new Einsiedel-Reiner heeling machine, was operating at 90 courses per minute. It is available in 6 to 12 sections. On this machine the heel and sole are joined automatically. A topping stand in connection with this full-fashioned machine provides a fundamentally new process. Another revolutionary mechanism for the full-fashioned machine seen at the show was the auto-welt device, which is entirely automatic in operation from the hooking-up of the first course, turning the welt, and transferring back on the needles.

For the first time, a single-section 54-gauge fancy lace welt machine to operate in conjunction with a standard single-section single-unit machine was shown. A 54-gauge ladies' and a 42-gauge men's half-hose machine were both single-unit and single-head.

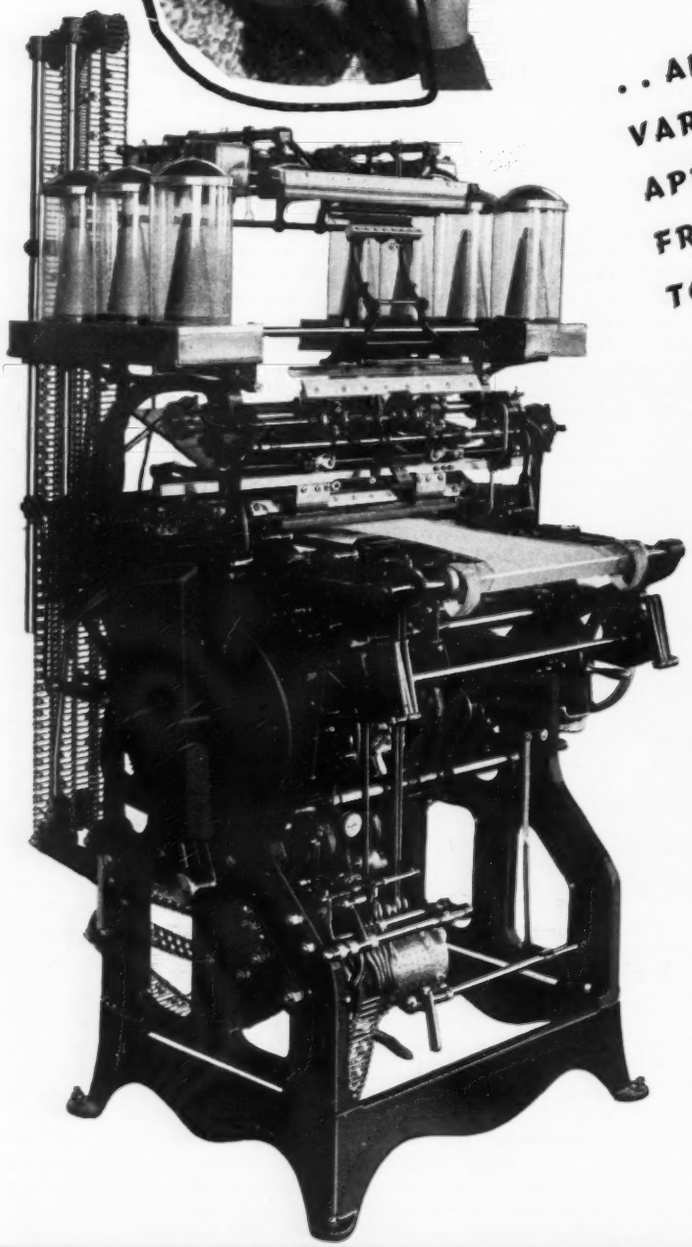
Going to circular machines, the first 3-inch Komet built in America was on display. It has 168 needles and was operating on crew socks for children. This machine, along with many like it, was to have been shipped directly to a southern mill. Other Komets on exhibition were the 3½-inch, 240-needle, double feed, 5-feeder plaiting, splicer, having the tipped heel and toe draw thread device; the 3½-inch, 220-needle, double feed, with 5-feeder plaiting, splicer, tipped heel and toe, and draw thread chain striper control; the 3½-inch, 200-needle, double feed, 5-feeder, plaiting and splicer, draw thread; and the Bentley Patterner Komet, 2¾-inch, 154-needle, equipped with Jacquard. This is the only type of machine made on this line; it has two cylinders. It produces socks for children with the pattern in the rib cuff, being an 8-color machine. The 3½-inch, 220-needle ES machine was equipped with a color-in-color chain striper. Several HH machines were also shown; the HHNRP 176-needle 3-color plaiting, combining reverse plaiting and float and striper; the 176-needle HHNRW with chain striper; the 3¾-inch, 168-needle HHNRP with chain striper and self-cleaning jack; the HHPW 4-inch, 108-needle, an entirely new machine with 7 fingers, chain striper for making heavy wool socks, and fitted with individual yarn clamp; two other HHPW machines, one 176-needle and one 220-needle, fitted with improved yarn clamp and 8 yarn changing fingers; the 220-needle, 3½-inch, HH 25-step spiral with chain striper and mock wrap.

A new development was the machine showing a very small rib tubing for straps on bathing suits being knitted. The 3¼-inch selvage welt striping machine had a self-cutting selvage welt, upon which the operative has only to pull the thread; this was a new machine. The multiple-head braiding machine for producing banding, candle wicking, shoe laces, etc., had individual feed heads and is equipped with stop motions. Another new machine on exhibit was the cable covering machine, which covers the wire cable by knitting a cover around it. The interlocked cover will not unravel, and the machine is capable of covering 1500 feet of wire per hour. The D9 240-needle French welt ribber was equipped with striper. A 240-needle S12R with rack welt had a 5-color knotter, and the S12PE, 220-needle, was equipped with a 5-color knotter, pivot attachment, and elastic laying-in attachment. Three R4DES ribbers were operating, each 4-feed, with elastic laying-in on one feed and having a special selvage attachment. The universal 3-carrier backwinder for full-fashioned was operating. Some of the other machines seen were an RI machine equipped with a 5-color knotter, a belt looper for the pants and garments trade, a fabric-testing machine for either knitted or woven goods, and a creasing machine for cuffs, collars, etc., in the clothing trade.

One machine exhibitor had five entirely new machines out of eight shown. Featured were machines for automatically transferring the tops, this being the first time the genuine rib top has been made on a machine and transferred automatically. Among the Banner machines operating at the exhibit were: the 19-step wrap, 3½-inch, 220-needle, 40 color machine

"I LIKE THE "ALL-OVER" EVEN TEXTURE OF SINGLE-UNIT HOSE.

". . AND NO VARIATION IN APPEARANCE FROM TOP TO TOE!



No doubt about it, Single-Unit hose are definitely in line with fashion trends—

Made with one continuous operation, on the very modern Wildman Single-Head, Single Unit Full-Fashioned Hosiery Machine, with perfect matching leg and foot, there are no unsightly shadings, no tell-tale rings where leg and foot meet.

Here then is a timely suggestion for "sales slack" . . . and for some quite important production economies—

Investigate . . . Details on request.

WILDMAN MANUFACTURING CO.
Norristown, Pa.

WILDMAN
THE WORLD'S STANDARD

WILDMAN SINGLE-HEAD, SINGLE UNIT FULL-FASHIONED HOSIERY MACHINE

with high splice and double sole trimmer, with the possibility of making color-within-color on 40 colors; the 8-step, 3½-inch, 220-needle, 48-gauge, high splice and double sole trimmer horizontal striper; the 48-gauge, 3½-inch, 220-needle, 8-step wrap, 12-step reverse plaiting machine with new plaiting features for independent sinker and needle control, and which can make wrap clocks with reverse plaited patterns; the 3½-inch, 220-needle, 48-gauge, 25-step reverse plaiting self-topping true rib machine with horizontal striper, an entirely new machine for making fancy socks; the split-foot automatic true rib 3½-inch, 240-needle 54-gauge, which formerly was a hand transferring machine, but which now has an automatic transferrer; the 8-step, wrap and elastic, 3-inch, 180-needle, 54-gauge machine, an entirely new one, which knits wrap and elastic without transferring, said to be a genuine 8-step wrap with laid-in elastic; the combination 8- and 12-step reverse plaiting machine, 3¾-inch, 120-needle, which is able to make wrap and reverse on coarse work; and, another new machine, the 3½-inch, 176-needle, 36-gauge, making a plain sock and with positive transfer from dial needles to cylinder needles, an automatic true rib self topping machine.

Getting away from the hosiery machines, a new machine, Model SH, a single-head spring needle affair, was on display. It makes everything from underwear to overcoat material. The drive is overhead and the machine is equipped with a braking mechanism. It features an improved yarn holder which is under the machine, flexible range by changing the gauge, and can be set up at the factory. An improved B2 machine for hockey caps had 4 colors and two feeds. Model C1 was a 3-needle rack sweater machine with 3-color striper on each feed, new and improved rack mechanism, separate attachment to insert the draw thread of a different and separate yarn, and racking in either direction controlled by the pattern chain. A foundation machine was being shown for the first time, making a garment with selvage edge and reinforced inlay. Three other machines were a 14-cut 16-feed underwear machine making cotton goods, a 28-cut, 24-feed rayon underwear machine, and a pattern bathing suit machine. One machine was on jersey cloth, a 24-inch 32-feed sinker top, on which any given feed can be thrown out at any time. A new machine was making pile fabric, and had a design wheel on every feed. This machine was said to double the production of the company's machine preceding this one. The 32-feed striper is capable of making stripes of any width on 32 feeds, and can use colors up to 32. A feature of this machine is that it eliminates center waste by a cutter and clamp on each feed. The baby shaker machine with 6 needles per inch is used for making undergarments and men's and boys' sweaters. It makes the 2-and-2 bottom and then transfers stitches from the cylinder needles onto the dial needles, and plaits worsted over cotton. For making ladies' hand-fashioned garments, the 28-inch 8-needle per inch machine was shown. It will make various stitch effects in lace and ribs. Another new machine shown was the 30-inch, 12-feed, rotary Jacquard which makes the finished welt with draw thread, plain rib, border, and designs in single, double, or triple colors. It uses the short chain system, making ladies' men's, and boys' sweaters. It is equipped with automatic stitch tighteners and two color stripers on each feed. The 7-inch 2-feed 4-color automatic rib toque machine shown can change colors at random. It has a revolving cutter with friction that will hold any number of ends, the cutter and friction turning away from machine and thereby throwing loose ends out so they will not knit in the fabric.

A double lock links CAL machine with single needle control and stop motion was on display; it is used for making sweater and dress goods. The RAL flat machine was also shown, as was the BUX hand machine for making sweaters. The pearl stitch or links and links machine exhibited transfers the needle from one bed to the other from either end. New to the show was a raveling machine which ravels damaged garments so that the yarn can be used again. A hand machine, duplicating the power machine, could be used for running samples. The double head border machine was capable of making 260 courses per minute. For making trimmings there were two high speed string machines with a production of 150 yards per hour. The knitting loom for such novelty work as scarfs, bedspreads, etc., had a dobby attachment for change of design. The tricot machine running at the show was 84 inches wide and was equipped with a new and improved automatic tension for the beams. It operates with hook needles, making 500 courses per minute, and is an all ball bearing, silent machine.

Several machines related to the knitting mills and throwing mills were in operation. The Roto-Coner was on exhibition, equipped with a precision slub catcher which is regulated by a tension spring and set according to gauge so that all slub catchers may be set uniformly. One motion loosens the adjusting screw, raises and releases the spring which automatically closes the blade on the gauge to the proper setting, and one motion locks it in place where no amount of tampering will allow it to be closed. The machine also had a paraffin attachment on the tension control bracket which allows no loss in the quality of the yarn by protruding fibers. The rotating traverse travels in the same direction as the yarn, thereby causing no chafing of the yarn. A machine which cones, doubles, and twists was making knitting packages and attracted especial interest from mill men and throwsters. A new twister capable of handling the size or weight of yarn package for efficient balance with preceding and following operations, and with the possibility of spindles and fingers being spaced as desired was exhibited. It has a simplified ball bearing twist gearing and a bobbin cover to minimize frictional resistance between air and yarn. Also running were the 5B for doubling and twisting from two to 16 ends and having the sliding motor drive and reversal of twist if desired, and the latest model of Stonington winder, built to meet individual requirements. Another rayon and silk winding machine had improvements for better controlling the yarn, and having a positive gear drive. A new silk throwing machine for hosiery doubles, spins or twists, and cones in one operation. A stop motion stops the spindle when a thread breaks. The Apex silk or rayon twister shown had been improved and was speeded to 17,000 r.p.m. on a single end, making crepe yarn. It is equipped with a straight line traverse on a rugged frame. The Duplex doubler twister has a one point adjustment traverse. The Simplex winder comes in single or double deck and has 56 changeable speeds, controlled by gears, and having an entirely new alternating traverse motion to compensate for thrust. The spindleless winder operates on rayon or silk at high speed, and may be equipped with an attachment for winding rayon cakes over end. In this same category comes the expanding swift for silk, cotton, and rayon mills, which is said to be evenly balanced and runs at high speeds.

Safety power tables are now equipped entirely with solid maple tops and have been improved by reducing the size of the shaft guards. Many loopers were on exhibition. The steady dials were being operated and representatives advised that the new Sotco is now available in coarse points. As usual, sewing machines were a center of attraction. Operatives were using the 41300 in seaming full-fashioned hosiery and other machines were on display for use in attaching elastic to hosiery and under garments. The new Metropolitan 950CDD2 for attaching trimmings to athletic shirts and similar garments operated at 4000 stitches per minute. A new elastic attaching machine 950W for use on rayon, silk, cotton, and wool knit underwear

also operated at 4000 stitches per minute. This 950W is the first of several new types of machines to be brought out. There was a special showing of new high speed seaming machines that go over the seams and catch every stitch so that no stitch will show on the face of the goods—to be used on fabrics from fine silk to sweaters. Other sewing machines on display were the high speed zigzag feed-off-the-arm, provided with fittings for making a special seam for use on ladies' underwear, especially designed to replace the company's present machine for making the pinked seam, and after being laundered it is said that this seam has the same appearance as before; the new 147 class top stitcher for putting edging on underwear, which is automatically oiled; the lap seam feller, which makes lap seams on bathing trunks; and the new high speed seam coverer machine. Greatly improved buttonhole machines were to be seen, made so as to make eyelet end buttonholes with or without fly bar in any length from ½- to 1¼-inch. A cord trimming machine does the work automatically and an eyelet machine makes 3/16-inch eyelets and pinholes.

Full-fashioned hosiery inspection equipment of the non-rotating type shows the operator the front of the stocking first, the form expands and the operator sees the back of the hose. At the toe a magnifying glass shows this important part of the hose. The inspection equipment has an automatic counting device. Recently developed in connection with the inspection equipment is a pre-inspection form for turning the stockings before inspection.

Boarding equipment consisted of both the regular forms and improvements in method. The Paraflex is a changeable contour form for instantaneous style changes, novel in construction. The automatic boarding, drying, stripping, piling, and counting machine was in operation and was an attraction to the mill men, as was the two-operator high speed machine for men's hosiery. Other equipment for boarding was heated by steam, hot water, electricity; the rotary boarding machine which allows the operator to stand in one position is heated by either steam or electricity.

Special machines and attachments were exhibited. Several types of moistening boxes, conditioning troughs, and porcelain eyelets were up for inspection. A package tyer operated automatically was offered as a great time saver. It ties the bundles without danger to the operator, being equipped with safety devices. Another machine was shown for use in multiple parallel tying, such as bolts of cloth, doing the work in a fraction of a second. The tension may be adjusted. The mending machine for silk stocking repairs was in operation; it is operated by air pulsations and re-knits the run in the hose. Marking equipment for shirts, underwear, hosiery, etc., and label printer with automatic stop to be set for a certain number of prints were seen.

Flexy carriers for full-fashioned machines were shown again at this show, as were stop motions for various types of knitting machines. An entirely new principle in labeling was brought out by the display of Prestomark machine. A thermoplastic material on the label fixes the label onto the fabric. The label will withstand laundering, thereby preserving the identification of the fabric. This machine was the center of much interest.

Dyeing and Finishing Equipment

Shown again this year with improvements was a piece goods dyeing machine, built to any size and equipped with stainless steel. The skein dyeing machine which comes equipped with either Monel or stainless steel may be used on rayon, cotton, or silk. Also shown was a rotary dyeing machine for hosiery. The package dyeing machine had automatic reversing device for controlled flow, with pressure gauges, timing gauges, etc. Packages in this machine come on each side of the manifold. An entirely new machine was the individual extractor which is said to prevent ends crushing by the centrifugal force. The machine is fabricated of stainless steel and requires two minutes to extract, after which time it automatically cuts off. Another new machine in this department is the single unit package dyeing machine, used for laboratory work and in the adjusting of shades.

Attracting much attention was the floating rotary dyeing machine, so made for easy penetration of the liquor. It has a stainless steel shaft running the entire length of the cylinder, and the cylinder is equipped with fool proof door locks. The cylinder compartments can be removed and replaced without disturbing the entire machine. The machine is said to prevent chafing, friction, tangling, etc. In the same booth was a conventional 4-pocket rotary dyeing machine, both machines being of stainless steel. The whirlwind basket on an extractor in another booth had a Monel basket.

As the machine was too large to be brought into the exhibition hall, a picture and diagram was placed as a backdrop showing the tube tex Type CF machine for wet spreading, extracting, processing, drying, conditioning, double steaming, winding, and measuring knitted fabric, all in one operation. Also of interest was the universal staple cutter for wool, cotton, jute, rayon, etc., cutting the staple at any desired length from ¼-inch to 6 inches. It makes from 150 to 800 cuts per minute, the stock being fed in the machine in 8 strands.

The Foldrite machine for folding towels and pillow cases can be adjusted to any known fold. It folds 1200 dozen in 8 hours with one operator. The machine also counts and stacks in any desired number per stack. An open top extractor of Monel metal was shown in the 150-pound 40-inch diameter size; also, there was a 17-inch 15-pound Monel metal one. The 50-pound rotary hosiery dyeing machine shown comes equipped in Monel metal or stainless steel as specified. An improved HW conditioner for conditioning yarn and for twist setting was on display. The improved universal calendering and folding machine has been redesigned and now runs two pieces at a time, steaming the goods on both top and bottom. The general upright finisher is used to finish horizontal stripes straight across the goods without distorting them. Another new machine was the one for pressing and shaping tuck stitch garments. The Rotopress for pressing athletic shirts and underwear handles 350 dozen in 8 hours with one operator feeding the garments and one folding them as they come out of the machine.

A number of metal companies were displaying their product in the form of dyeing equipment, slasher rolls, boxes, trucks, etc. Among these were Enduro, Armco, and Monel.

An attractive and original booth was built of paper cones and tubes, representing an oriental pagoda. Even the indirect lighting was made of inverted cones. Colored bobbins of Dilophane laminated on vulcanized fiber to form Fibrephane were seen, as were bakelite conditioning boxes and trucks, which are not affected by steam. Spools, gears, shuttles, etc., were shown manufactured of Phenolite. Other spool and bobbin companies had novel displays.

The research department of the National Association of Hosiery Manufacturers had an educational booth, with pictures showing methods of testing, defects in hosiery, defects in raw silk, and hosiery fabric defects standard. Kodapak for inserting in better grade of hosiery and machines for doing this work were present. Two new yarns were shown, Filatex, a cotton covered latex yarn in various stretches and sizes, which can be dyed any color, and used especially for the knitting trade; and Pluralastic, formed by bonding together strands of ordinary rubber thread. Several new chemicals were being described by representatives, among them a new type duller which pre-

"The early sower never borrows of the late"

OLD PROVERB

. . . and only with modern machinery can we provide satisfactory wages without sacrificing the advantage of low unit cost . . . Full-fashioned machines that were new in 1930-31 cannot compete on any basis with the new READING high-production Machines of 1938. Write us for facts.

TEXTILE MACHINE WORKS • READING, PA.

Rochester Super Dyeing Machine. 25 lb. capacity. Other models of varying capacities available.

Equally Safe IN EITHER PLACE

The sheerest of chiffon hose is as safe in a Rochester Super Hosiery Dyeing Machine as in the tissue-lined box in which you ship them.

The hand-honed interior finish of the Rochester Super Hosiery Dyeing Machine is smoother than the smoothest paper. There are no burs or invisible projections to snag delicate strands, and cause costly increases in rejects and seconds. The extra savings a Rochester Super Dyeing Machine effects will pay for it in a short time. Write for complete information to Rochester Engineering & Centrifugal Corp., 106 Buffalo Road, Rochester, N. Y.

RE PRODUCTS

ROCHESTER ENGINEERING & CENTRIFUGAL CORP.

cipitates into the fiber itself and withstands laundering.

In the lighting field was a combination mercury vapor-incandescent unit of 875 watts for general industrial lighting, a new model 350-watt Cooper-Hewitt with the same light intensity as the former 450-watt lamp. One lamp made it possible to use invisible ink on fabrics for identification purposes, the mark being brought out only under the fluorescent lamp. Other lamps ranged from 1/20-watt to 3 watts in the neon glow classification. Color matching lamps were exhibited, as were lamps to determine color fastness.

Several companies were celebrating anniversaries. Smith Drum & Company is in the 50th year and displayed the anvil that was used in the first shop the company opened, and the first note for borrowed money, signed one year after the company was formed; it was for $75.00. Merrow Machine Company celebrated its 100th anniversary. H. Brinton Company this year is celebrating its 50th anniversary and at the show had running a ribber that has been in use constantly for 43 years. COTTON also celebrates an anniversary this year, its 40th, and will commemorate the event by a special October issue.

Important Meetings Held During Week of Knitting Arts Exhibition

THREE MEETINGS of great importance to two of the major divisions of knit-goods manufacture were held in Philadelphia during the Knitting Arts Exhibition in April. The first of these was the annual convention, on Tuesday, April 26, of the National Association of Hosiery Manufacturers; the second, on Wednesday, was a hearing under the auspices of the Federal Trade Commission on the proposed Trade Practice Rules for the Hosiery Industry; and the third, on Thursday, April 28, was the annual convention of the Underwear Institute, which, with the hosiery association, co-sponsors the knitting show.

The hosiery convention on Tuesday was marked by a large attendance, which heard comprehensive reports from President William H. Gosch, and Managing Director Earl Constantine on the activities of the organization during the past year; a report from Edward S. Jamison, chairman of the steering committee of the Association's recently organized merchandising division; and a report, read by C. J. Huber, on the activities of the Association's raw silk committee.

Important amendments to the Association's by-laws were adopted, the most significant change being a revision of the administrative set-up of the organization. The recommended amendment, which was approved, provides that the board of directors shall elect a chairman of the board, two vice-chairmen, a president and a treasurer. The chairman, the two vice-chairmen, and the treasurer are to be elected from the membership of the board, while the president need not be a member of the board. In the new set-up, the chairman and the two vice-chairmen assume the duties previously performed by the president and the two vice-presidents, while the new president becomes the chief executive officer of the Association, assuming the duties formerly performed by the managing director.

At a meeting of the new board of directors following the annual convention, Austin H. Carr, president of the Durham Hosiery Mills, Durham, N. C., was elected to the newly created position of chairman of the board. Roy E. Tilles, Gotham Silk Hosiery Company, New York, and R. O. Huffmann, Morganton (N. C.) Full-Fashioned Hosiery Mills, were made vice-chairmen; and Ernest Blood was re-elected treasurer. Earl Constantine, for the past several years managing director, was made president of the Association under the new set-up, and Reuben C. Ball, who has been Mr. Constantine's assistant, was elected secretary.

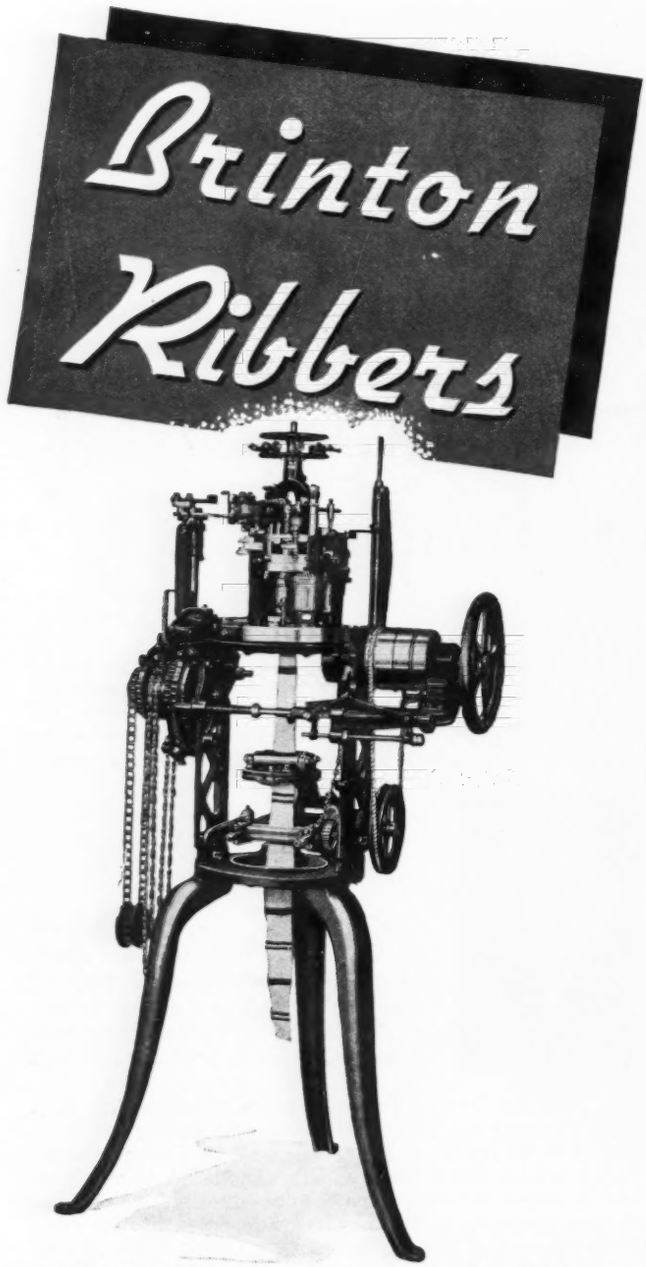
New directors of the Association include James M. Beverly, Ballston-Stillwater Knitting Co.; Ernest Blood, John Blood & Co., Inc.; John Bromley, Quaker Hosiery Co., Inc.; J. E. Millis, Adams-Millis Corp.; and George C. Szabo, Holston Mfg. Company.

On Wednesday of show week, a very large number of hosiery manufacturers and others interested attended a protracted meeting for the purpose of considering the proposed fair trade practice rules for the hosiery industry. The meeting was held under the auspices of the Federal Trade Commission, and was directed by Henry Miller, assistant director of the FTC's trade practice division. The proposed rules, which have been widely circulated throughout the hosiery industry, are a subsequent development to the adoption of the rayon trade rules by the commission and in line with its new policy of requiring identification of fiber content, etc., in textiles. Mr. Constantine explained that the prior policy of the commission has been to permit a manufacturer to mark or not to mark his products as to fiber content, but, if he elected to so mark them to require the proper marking; the new policy is to require fiber content to be marked in all products.

Austin H. Carr, president, Durham (N. C.) Hosiery Mills, who was elected to the newly created post of chairman of the board of the National Association of Hosiery Manufacturers . . . . . .

Mr. Constantine explained the reasons why the hosiery industry is requesting a special set of rules, since its products cut across the entire range of fibers horizontally, as distinguished from a one-fiber industry; and because its product is completed usually for the ultimate consumer, which is not the case with certain other textile products such as yardage goods.

The protracted meeting was devoted to a presentation of the rules themselves, and interpretations of them and the submission by hosiery men and others interested in desired changes. Irving C. Fox, counsel for the National Retail Dry Goods Association; Ephraim Freedman, chief of R. H. Macy & Co.'s bureau of standards; Dean Hill, president of the Durene Association of America and of the Mercerizers' Association of America; and R. D. Hall, president of the Southern Combed Yarn Spinners' Association, were among those



Rubber Lay-In
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Let the new, modern Brinton Ribbers carry the burden of your production problems. Modernize your old ribbers, by converting to the latest styles. . . . For dependable, economical production—rely on Brintons.

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offering suggested changes.

A stenographic record of the proceedings was taken by the FTC, and Mr. Miller explained that all points brought out would receive the full consideration of the commission, which would conduct a public hearing on its final draft of the rules, with two weeks' public notice.

The annual convention of the Underwear Institute was held on Thursday, April 28, and met, for the first time in years, without the presence of Roy A. Cheney, its managing director, who was suddenly called on the eve of the meeting to Belton, S. C., because of the fatal illness of his wife. Mrs. Cheney passed away on the day of the convention, and the association, as well as countless individual friends, sent messages of sympathy and condolence.

Report of officers and executives occupied the major portion of the convention session. Ralph M. Jones, vice-president, Utica (N. Y.) Knitting Co., made his annual report as president of the association, and the prepared report of Mr. Cheney was read. John D. Strain, industrial relations counselor of the Institute, and Francis E. Simmons, assistant director in charge of research, made reports on the activities of their respective offices. Lawrence Myers, chief of the marketing section of the Agricultural Adjustment Administration, also spoke, dealing chiefly with the processing tax. He expressed the opinion that a floor stock tax would not be incorporated in any new legislation along the lines of a levy on cotton.

Robert Ramspeck, member of Congress from Georgia, and chairman of the House labor committee, spoke to the underwear manufacturers, placing himself on record as opposed to the prevailing wages-and-hours bill. He expressed himself in favor of wages-and-hours legislation, however, along the lines of the original House committee report which he had sponsored and which had been materially revised in the preparation of the existing bill.

The Institute went on record, in resolutions adopted at the Philadelphia meeting, as being opposed to the enactment of Federal wages-and-hours legislation as then pending before Congress, though in sympathy with the principle of regulation in a practical way; it further recorded opposition to any processing tax on cotton or rayon and their products, and against the Borah-O'Mahoney licensing bill.

Ralph M. Jones was re-elected president of the Institute for a fourth term. W. W. Moyer was re-elected second vice-president; and Oscar W. Gridley, re-named treasurer. Grover C. Good, of Globe Knitting Works, Grand Rapids, Mich., was elected first vice-president succeeding Benjamin C. Russell, of Russell Mfg. Company, Alexander City, Ala.

Oil and Grease

Workers sometimes complain that oil and grease cause eruptions and other skin affections. But there is nothing infectious in oil or grease. The trouble is in imperfect methods of cleanliness.

1. Clean oil and grease off the skin carefully. If allowed to stay it serves as a vehicle for maintaining dust, dirt and harmful bacteria on the skin, and this can cause serious skin troubles.
2. Wash the hands and arms with soap and warm water, using copious quantities of both and if necessary a soft brush.
3. Repeat this scrubbing process at noon before eating, and at night before going home. After scrubbing, use a little vaseline, lanolin or other ointment to prevent chapping.
4. Keep a soft brush and towel for your individual use; do not use the brushes or towels of others.
5. Under no circumstances use gasoline, naphtha, kerosene, turpentine or strong lye soaps to wash with. Some of these may be especially injurious to you, although not to others. They also remove the natural oils from the skin, leave it irritated and sometimes inflamed.
6. Have oily or greasy garments laundered frequently.
7. Get first aid for any scratch or cut, no matter how slight it may seem to you.

—*National Safety Council*

TRENDS and HIGHLIGHTS of the KNIT GOODS MARKETS

Seasonal Upturn in Hosiery but Volume Disappointing. Underwear Manufacturers Continue Slow Production Schedules. Gains Made by Seamless Women's. Bright Colors for Women's Hosiery. Prices Unchanged.

Philadelphia, April 16, 1938

HOSIERY MANUFACTURERS during the last month have enjoyed a conservative upturn in orders and in mill operations but this has been seasonal and much under expectations. Even this has not taken place among most underwear mills, except in the case of a few which are busy making deliveries on polo shirts. The feature of the pre-Easter hosiery market has been the demand for novelties in women's lines and also the interest in high colors. Included in the novelty lines that are wanted are laces, and also hosiery with a contrasting seam, both in mock seam and full-fashioned. There has been no change in knit goods prices this month, both hosiery and underwear remaining unchanged compared with last month. Several knitters in other sections have named very low prices on fall outerwear, prices which local mills say would mean a loss here but little business has been booked by mills in this class as yet. The new Federal spending program has had little actual effect on knit goods up to this time but sentiment now is more favorable than it was a month ago.

Full-Fashioned

There has been little change in full-fashioned prices this month, dullness bringing about minor reductions in low-end lines while branded and better hosiery have remained steady. In the few weeks before Easter full-fashioned mill activity reached the highest level in several months but a few days before the holiday mills reported that their orders were cleaned up. They then went back on schedules about like those of early February and they looked for a less active period for a time. Unless general conditions spurt, hosiery mills do not look for the second quarter to be much larger than the first. High colors are wanted in women's lines and the colored seam is going well; mills making novelty hosiery have been far busier than those on staples. Iridescents in women's numbers have been selling well but retailers have been conservative in their buying, taking only small amounts from the manufacturers at a time although reordering many times. Mills are carrying stocks for retailers now. Retail full-fashioned at 69 cents to $1.00 is the most active with several stores saying 79 cents is the largest number now. Branded knitters are expected to hold prices unchanged for some time ahead, these plants having been more active as a group so far this year than unbranded.

Men's Half-Hose

There has been a spurt in men's half-hose after months of severe dullness. Branded lines of these are reported to be selling at the best rates of the year with the men wanting louder colors and patterns than for years past, according to leading jobbers and retailers. Jobbers say that they expect to sell much more proportionately of the slack type, that is, socks with a short top and usually with a rubberized yarn to eliminate garters. These socks or slacks are already selling very well with large wholesale firms who say this indicates that when warm weather comes demand will be even greater. They expect slacks to be an outstanding item for men this season.

Anklets

Demand so far has been disappointing in anklets, the seasonal upturn that should be here not having come to the degree that manufacturers expected even under present depressed demand conditions. Yet the trade looks for a good season in anklets of both the turn-down and straight types. Prices of these numbers have not changed this month and jobbers report manufacturers are turning out a better grade anklet than for several seasons past, many mills keeping their lines in the old retail price brackets but making them better. Mercerized and rayon yarns are used but most anklets continue to feature mercerized. Retailers are only now beginning to stress anklets in their advertisements and they expect warm weather to stimulate consumer interest, so that a fairly good but late season is expected. The lateness of Easter this year has held back the season in addition to poor retail sales and general lack of confidence.

Women's Seamless

Women's seamless hosiery has made outstanding gains this year, this occurring in both silk and rayon. Some of the spring seamless silk hosiery has been as attractive as the seamless industry has ever produced and comes closer to competing with full-fashioned on this score than heretofore. Jobbers say they have been doing very well with silk to retail from 35 cents to 50 cents per pair while good volume has been done in rayon seamless that will retail from 15 cents up, 19 cents being a good price at retail. Data prepared by the National Association of Hosiery Manufacturers show that shipments of women's silk seamless gained 10.8 per cent the first month while seamless rayons did even better with a gain during that period of 27.1 per cent. Seamless cotton hosiery shipments were down 27.7 in January compared with previous December.

Underwear

Demand for underwear has been very small and except for a seasonal upturn in production of polo shirts is without favorable signs. Manufacturers in this section are on two-day-a-week schedules in many instances. They have done little in spring goods although warm weather now is helping these numbers and demand for the coming fall season has not developed yet to any large extent. Prices are unchanged over the month but cannot be said to be steady even though knitters named very low fall prices. Manufac-

turers finished 1937 with large stocks of goods and these have to be liquidated before machinery can be operated at high rates. One bright feature is that the severe curtailment among manufacturers is having the effect not only of reducing stocks all along the line but this has brought about late deliveries where goods have to be made up in special styles. This gives buyers a feeling of uncertainty and may shortly result in a better volume for early fall than was previously expected. Wholesalers feel that low prices on fall lines will give a good push to fall sales later this year. Men's cotton ribbed underwear in the 12-pound union suits, for example, will be obtainable over the retail counters as low as 79 cents per garment, covering better quality garments sold through wholesalers.

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Canadian Ringless Patent Invalid

A Canadian court on March 22 held invalid the Kaufman Canadian patent on "ringless" full-fashioned hosiery, following much the same line of reasoning in reaching this decision as did the Federal District Court in Philadelphia which last April pronounced invalid a similar patent issued in the United States. The Canadian judge, approximately 11 months after conclusion of the Canadian trial, decided that Kaufman's multiple-carrier patent was invalid for lack of invention. The decision cited prior art in branches of the knitting industry other than hosiery, held in effect that three-carrier hosiery knitting was merely an adaptation of a known principle in other divisions of the knitting trade and expressed the opinion that if there were any invention involved, Paul Krenkel, not Charles A. Kaufman, was the first inventor.

One effect of this decision was to bolster the position of the group of full-fashioned mills in the United States which banded together to fight the validity of the Kaufman patent here, and to oppose the terms and conditions on which licenses under this patent were offered to domestic manufacturers. Even the decision in the Canadian courts is not a conclusion of the fight because it is evident that the Canadian decision will be appealed while arguments on an appeal from the United States District Court's decision is expected to be held within the next couple of months before the Circuit Court of Appeals in Philadelphia, and both sides of the controversy expect the case to be taken to the Supreme Court in this country for final decision.

Excerpts from the decision of the Canadian Court follow: "I do not think there is invention in Kaufman. It is true that the method of knitting he described and claimed had not been applied before in the manufacture of full-fashioned silk stockings, and particularly of the weight in which the so-called bands or light and heavy shade characteristics, might ordinarily be observed, but for analogous purpose, in the knitting of outerwear, neckties, woolen hosiery and other articles, multiple yarn carriers were employed for diffusing yarn variations, so that bands or light and heavy shade characteristics, might be substantially eliminated. Monopoly cannot be granted for every slight improvement or for the adaptation of well-known practices to the same or slightly different purpose, where no difficulty arises in applying the new use." Referring to Paul Krenkel, principal contender with Kaufman, the judge said he was an inventor and it can not be said he ever abandoned his invention. "Upon the facts I am of the opinion Krenkel was the first inventor," the Canadian judge declared.

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New Shades Stressed in Fall Silk Card

Fifty-two colors have been announced for fall silks by the Textile Color Card Association. Of these there are 12 featured shades, based on court fashions of the 17th and 18th centuries. As in the fall woolen card recently issued, the basic shades in the silk card are shown in two separate groups. One classification portrays darker basic colors and lighter harmonizing shades, while the second group high-lights the smartest contrasting notes. These 12 shades are as follows: Pompadour mauve, du Barry pink, Trianon yellow, Marie Antoinette blue, rose de Versailles, Fragonard green, Maintenon blue, French cyclamen, vert royal, orangerie, fete red and bleu de roi.

◆

Hosiery Retains Position as One of Retailers' Best

Hosiery departments have been among the few to keep the retail volume near last year's level. A majority of departments other than hosiery in retail outlets are finding their sales running below the level of general department store trade. Although they did not record as good gains over 1937 in February as they did in January, hosiery departments in the country's heavier trading areas showed gains in some sections and in all reporting districts did business at a better rate, compared with the preceding year, than did the average store as a whole. Reports indicate that retail hosiery sales during March, while not showing gains over the same month a year ago, due to the late Easter, will again show to have run ahead of general department store business. In this connection, several department stores in Philadelphia report that while March was under the corresponding month of 1937 they expect the two months, March and April, to make a favorable comparison with the same period last year. They are counting on the late Easter to bring sales up this month.

◆

Underwear Inventories Larger at End of 1937

The final 1937 report for the underwear industry by the Department of Commerce showed mill stocks of knit underwear of cotton or wool at the end of December as 3,610,000 dozens, which compares with 2,735,000 dozens for the end of 1936. The stocks of men's heavy union suits of all kinds were 367,000 dozens compared with 188,000 a year previous. Boys' heavy union suits also showed a considerable gain, being 129,000 dozens this past December compared with 68,000 for the end of 1936. In contrast to this, stocks of polo shirts actually were lower December, 1937, compared with a year previous, the figures being 145,000 dozens for last December compared with 188,000 dozens for the year before. Orders on hand in knit, cotton, and wool underwear last December amounted to only 2,465,000 dozens compared with 5,757,000 dozens a year before. The lightest productive month of the year for knit underwear was December, with an output of 1,065,000 dozens. Of the year's production, men's athletic shirts accounted for the largest single item, while men's heavyweight knit suits of all kinds made up the next largest item.

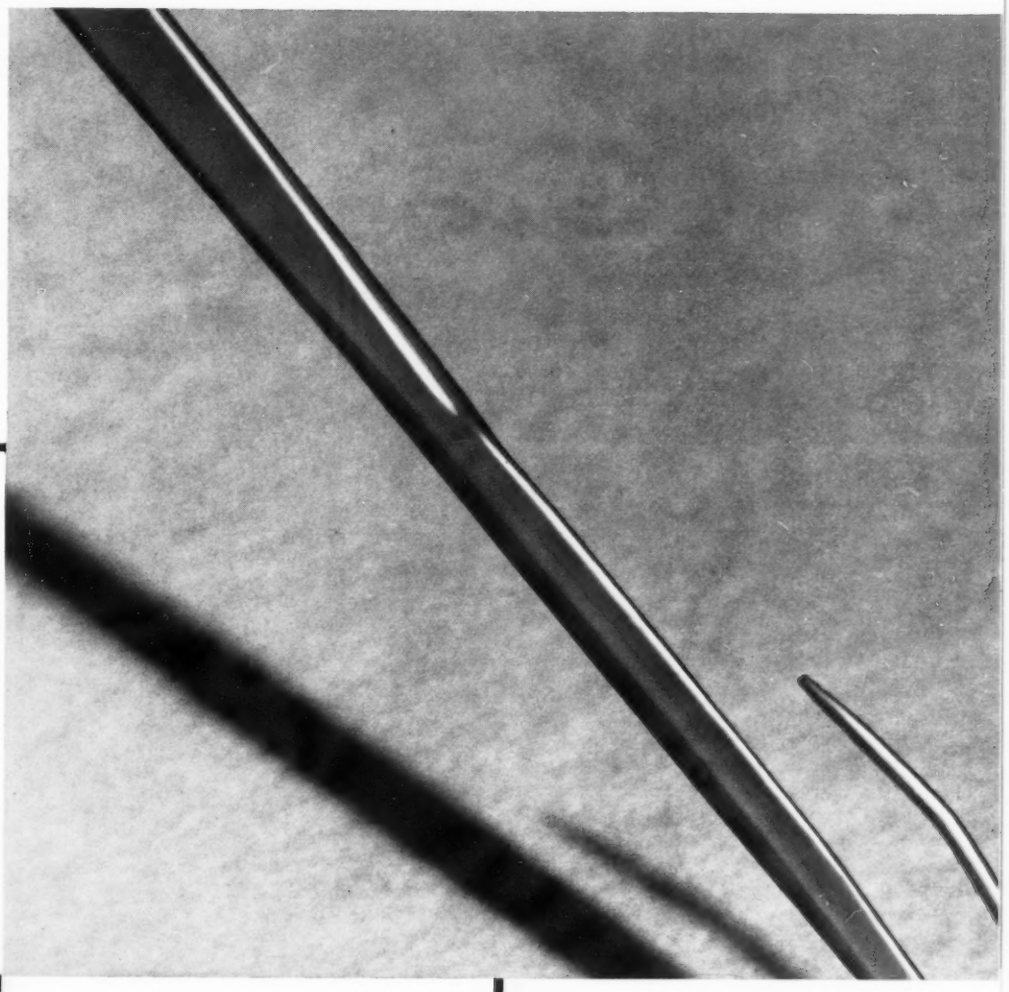
◆

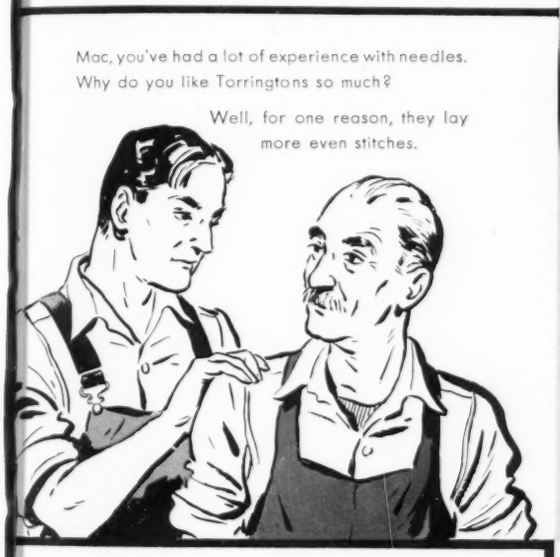
Knit Outerwear Rules

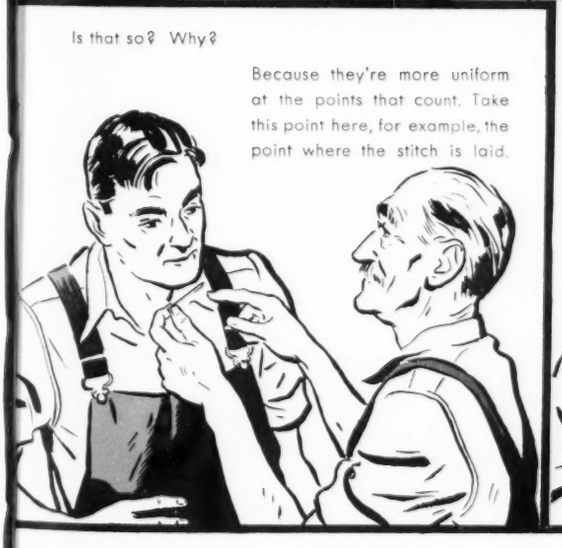
With one major and one minor change, the trade practice rules of the infants' and children's division of the National Knitted Outerwear Association were adopted at a New York meeting March 21 and were referred at once to the Federal Trade Commission for approval. The rule concerning the

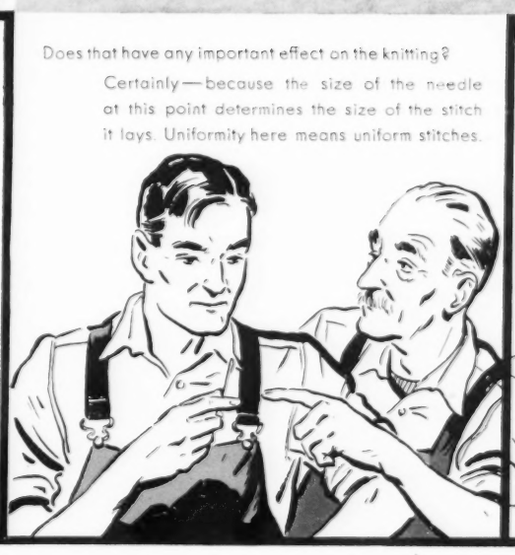
EXPERIENCE SAYS "TORRINGTONS"

Detailed uniformity is essential if needles are to perform with economy and efficiency. Let an expert tell you how *machine manufacture* gives Torringtons an extra degree of uniformity in one small but vitally important detail.



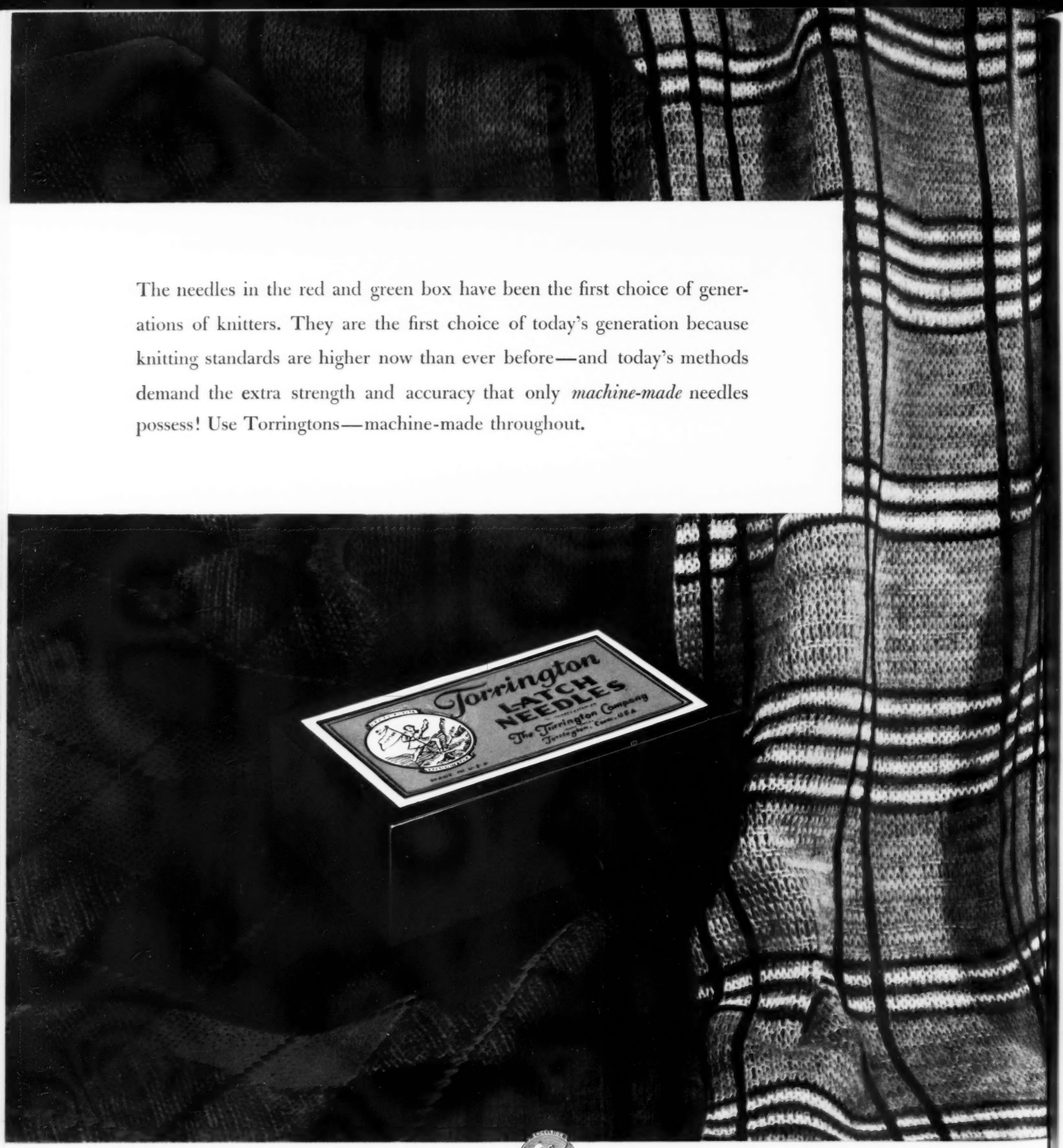

Mac, you've had a lot of experience with needles. Why do you like Torringtons so much?
Well, for one reason, they lay more even stitches.


Is that so? Why?
Because they're more uniform at the points that count. Take this point here, for example, the point where the stitch is laid.


Does that have any important effect on the knitting?
Certainly—because the size of the needle at this point determines the size of the stitch it lays. Uniformity here means uniform stitches.

How do you know Torringtons are more uniform in details like this?
Experience proves it, my boy, and besides, Torringtons are machine-made from tip to butt—with the accuracy that only machines can give!

TORRINGTON *Needles and Sinkers*



The needles in the red and green box have been the first choice of generations of knitters. They are the first choice of today's generation because knitting standards are higher now than ever before—and today's methods demand the extra strength and accuracy that only *machine-made* needles possess! Use Torringtons—machine-made throughout.

THE TORRINGTON COMPANY **TORRINGTON, CONN., U. S. A.**

The Torrington Company, 1640 Fairmount Ave., Phila., Pa.
The Torrington Co., Inc., 200 Fifth Ave., New York, N. Y.
The Torrington Company, 538 South Wells St., Chicago, Ill.
The Torrington Company, Guilford Bldg., Greensboro, N.C.
The Torrington Co., Ltd., 137 Wellington St. W., Toronto 2, Ont.

The S. M. Supplies Co., 210 South Street, Boston, Mass.
E. G. Paules, Bendix Building, Los Angeles, California

Factories at

Torrington, Conn.
Upper Bedford, Quebec
Coventry, England
Aachen, Germany

Torrington LATCH Needles

return of merchandise was changed to read: Returns for credit or exchange or worn or washed garments may not be accepted except for defects in manufacture or material. Returns for credit or exchange of garments not worn or washed may not be accepted unless there are defects in manufacture or material, and unless such return is made within 30 days after receipt by the customer. Return of defective garments under the foregoing for credit exchange or repair may be accepted only after written notification to seller, stating reason for such return. Credit may not be allowed in any case until seller has examined merchandise and determined the claim justifiable.

◆

Apex City Damage Suit Postponed

The $1,000,000 suit against the City and County of Philadelphia brought by the Apex Hosiery Company, an outgrowth of the strike disturbances at that mill last year which had been set for argument in Common Pleas Court No. 6, of which Judge Curtis Bok is president, was postponed until April 25. The company alleges that great damage was done by striking members of Branch No. 1 American Federation of Hosiery Workers and that police failed to protect the property, standing by while it was being damaged. Because the union is defendant in a $3,000,000 suit growing out of the same strike, and which will come up for a hearing in the United States District Court, the County of Philadelphia, through William T. Connor, special counsel, directed that M. Herbert Syme, counsel for the union, appear for the union as a joint defendant.

◆

Hosiery Union Suspends Blackwood (N. J.) Branch

An unusual development in hosiery union activities occurred this month when Branch 137 of Blackwood, N. J., was suspended by Emil Rieve, president of the American Federation of Hosiery Workers. This action came about in connection with the Cambria Hosiery Mill, which the union reported, had locked out its employees, members of Branch 137, in an attempt to cut wages. Contrary to the instructions of the union and union officers, it was stated the individual members agreed to work under rates below the present arbitrated wage scale and also signed a release from the terms of the union contract. On March 19 the branch held a meeting and adopted a resolution attacking the Federation and reasserting the determination to work at the sub-standard rates of pay. In commenting on the case, the union attorney said: "It would indeed be fantastic to hold, that despite all legislation in favor of collective bargaining agreements the labor organization cannot enforce it. Such a position is as fantastic as it is legally untrue."

◆

Japanese Hose Imports Decline

The sharpest decline in Japanese hosiery imports since the quota agreement went into effect took place the first two months of this year, according to the National Association of Hosiery Manufacturers. The quota of 1,500,000 dozen pairs annually of cotton and rayon hosiery made it possible for the Japanese to ship in 125,000 pairs monthly. In the first two months of last year the total imported was only 140,077 dozen pairs and in the first two of this year the imports fell to only 24,885 dozen pairs. In this connection the association commented: "The very sharp reduction in the exports reflects the conditions under which Japanese industry has been operating during more recent months as the result of war. It also indicates doubtless a reduction in the market for such goods. The figures for January and February of the current year must not be taken as necessarily indicative of what the average monthly exports may be for the remaining months of the year." The statement added that if figures continued for the whole year on this basis, they would amount to only 10 per cent of the quota and it is probable that Japanese exports to this country for 1938 will remain within the quota by a larger margin than was the case last year.

◆

Women's Spring Hose Trends to Bright Colors

Women's apparel this spring will be more colorful than for a number of years, according to fashion authorities and hosiery is keeping up with this trend. Spring hosiery shades are brighter and more colorful, department stores here reporting that what they call high shades are selling in an outstanding manner while the quieter tones of previous seasons are being left alone. Colored seams harmonizing or contrasting the stocking color are appearing in the lines of more manufacturers and retailers report that contrasting seams in both seamless and full-fashioned lines are being accepted by more consumers. Colored toes and heels designed for wear with the open toe and heel shoes have been introduced by seamless manufacturers and are expected to be big sellers this spring. One of the largest hosiery jobbing firms in this city is having good results at present with a seamless silk with contrasting colored seam, heel, and toe, which will retail at 50 cents per pair, being all silk. Retailers also report that other types of novelty stockings, including laces, are going to be popular this spring.

◆

Hutton President of Hemphill

Alfred L. Hutton, Jr., has been elected president of the Hemphill Company, Pawtucket, R. I. He has served more than 20 years with the company and has been vice-president in charge of production and sales for the past two years. In this capacity, he traveled widely studying knitting mill equipment needs, and has been closely associated with the development of the new line of self-topping machines recently announced.

Mr. Hutton

◆

George E. Drum Passes

George E. Drum, co-founder of Smith, Drum & Company, passed away March 16. He was closely identified with the engineering department, his partner, Mr. Smith, taking care of the outside contacts. Upon the death of Mr. Smith in 1929, Mr. Drum was elected president of the company, having served up until that time as vice-president. He had been in poor health for the past five years and took little part in the active management of the business. With Mr. Smith, the partnership was formed in 1888, and continued as such until 1924 when the business was incorporated. Interment was in Westminister Cemetery, Philadelphia.

Mr. Drum

Underwear Mills Oppose Lower Tariff on Wool

"There is no reasonable cause for reduction of knit wool import duties and further any reduction constitutes an injustice both to the trade facts and the domestic wool underwear industry", a brief filed by the Underwear Institute declared in opposing proposed lower duties on knit wool underwear in the pending reciprocal trade agreement with the United Kingdom. Among the main points advanced in opposition to lower wool tariff duties fully elaborated in the brief were: That the duty on knit wool underwear valued at over $1.75 a pound was reduced in the trade agreement with Switzerland, effective February, 1936, to the lowest point in the years since the Fordney-McCumber Act of 1922 first classified knit wool underwear for tariff purposes; that lower raw wool prices following the drafting of the Smoot-Hawley tariff of 1930 has materially lessened the protective effect of our tariff; that increasing domestic labor costs and payroll taxes have materially lessened the protective effect of the 1937 tariff; that because of the tariff reduction on wool underwear in February, 1936, imports have increased more rapidly than domestic production. The brief pointed out that not only did the general imports practically double from 1935 to 1937 because of this tariff concession, but that the increase from the United Kingdom has been exceptional.

◆

Princess Royal Equipment Sold for $80,000 at Auction

Auction of the full-fashioned hosiery knitting machines and other assets of the Princess Royal Hosiery Mills, Inc., of Reading, Pa., was held on March 23, bringing a total of approximately $80,000, thereby eliminating the jobs of 240 Reading hosiery workers. This auction came as the aftermath of this firm's operation under a Section 77B petition for more than a year. Of the firm's 57 machines, 28 were of 42-gauge, 20 were 48's and the remainder were 54's. The 42-gauge machines were sold at $375 each; the 48's at $1200, while the 54's brought $4500 each. Some of the 54-gauge machines were purchased by a representative of a southern hosiery concern, these having cost about $15,000 each when new about four years ago. This auction winds up the affairs of the firm and an official said the company would be dissolved.

◆

Aberle to Dispose of Old Equipment

H. C. Aberle Co., Inc., Philadelphia, will dispose of its older full-fashioned hosiery machines and is considering installing new fine-gauge equipment, according to an announcement by Gustave C. Aberle, vice-president. He said that: "In order to continue the past policy of only offering the higher quality hosiery, the H. C. Aberle Co. has decided to dispose of the portion of their equipment which is no longer able to produce such merchandise. The company contemplates adding in the future additional new fine-gauge equipment." Mr. Aberle said decisions on these points have been made with the co-operation of the company's employees.

◆

Silk Hosiery Consumption Shows Increase

Statistics prepared by the National Association of Hosiery Manufacturers reveal that in recent months shipments of both women's full-fashioned and women's seamless silk hosiery showed increases, while other branches of the industry were registering decreases. The gains in shipments last February in these two divisions were small but were in contrast to the general trend. As the hosiery association pointed out, February, 1937, was an unusually good month for the hosiery trade and comparisons with it seem sure to be disappointing in view of the slack condition of general business this year, making the showing of women's silk hosiery remarkable. One of the reasons was that it has been demonstrated in the past that in a depression sales of men's and children's apparel usually feel the pinch before women's lines are affected. Women's seamless silk stockings have sold exceptionally well since the first of the year but there is no evidence that seamless silks have cut into full-fashioned. Inasmuch as it is unlikely that an appreciably larger number of women are wearing silk stockings today than a year ago, it has been concluded by some that the strong trend towards sheerer stockings is boosting consumption. This trend towards sheerer full-fashioned goods is especially apparent this spring.

Hosiery Union Asks for Governors' Views

The American Federation of Hosiery Workers early this month took the first step in a move to place before its annual convention at Charlotte, N. C., May 2, the views of Governors in 14 textile states on the union's organization plans and policies. President Emil Rieve said he had invited the governors of these states to conferences with union representatives: West Virginia, Virginia, Maryland, North Carolina, South Carolina, Massachusetts, Delaware, Illinois, Kentucky, Mississippi, Tennessee, Georgia, Florida, and Alabama. Rieve wrote the Governors: "It is not and never has been the aim of the trade union movement to drive industry from one section of the country to another. We feel that the basis of competition between different sections of the country should be the comparative efficiency of the concerns involved."

◆

Cotton Lisle Hosiery

Production of lisle hosiery, which was given considerable impetus by the movement to boycott Japanese products some months ago, has been reduced. Early in the year 55 mills had switched a part of their machinery to lisles from silk hosiery, but not more than 20 mills were recently manufacturing the cotton product, according to Dean Hill, secretary of the Durene Yarn Association. The mills now making these stockings, Mr. Hill said, are promoting them solely as style items, without reference to the boycott movement. Promotions in about 100 stores throughout the country have brought satisfactory results, he said, adding that further expansion was expected during the spring season. Sales in the South have been aided by promotions tied in with the drive to increase consumption of cotton products.

◆

Phila. Textile Assn. Tries to Keep Mills

"The textile industry of Philadelphia is determined to solve the problem of continuing business in this section," C. Marlin Bell, general manager of the Philadelphia Textile Manufacturers Association, said in announcing the formation of a Bureau of Research which will have a wide range of activity. "This bureau will tackle the problem of the manufacturer from an individual rather than a group standpoint. Ways will be found to extend

"THAT PROCTOR & SCHWARTZ EXHIBIT OPENED MY EYES"!

May 6, 1938

Dear Bill,

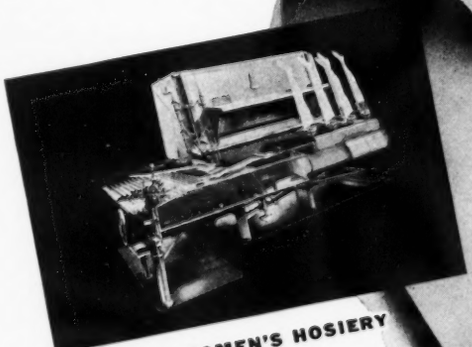
Last week I went over to the Knitting Arts Exhibition in Philadelphia, and believe me, I'm glad I did. That Proctor & Schwartz exhibit opened my eyes! They have two new Automatic Boarding Machines that are almost human. As I told you last month, I've been trying to figure a way to cut down production costs; and boy, that P. & S. machine is the answer to my prayer! And while it's cutting costs, it will improve quality at the same time.

I certainly was sorry that you couldn't be there ...because I think that half-hose machine of P. & S. is just what you need. Enclosed are photos of both machines. Of course, you can't tell much about them from the pictures, but I suggest that you do just what I'm doing...write to Proctor & Schwartz and get all the facts. I've bought from them before, and they know their stuff when it comes to drying anything! Your inquiry won't obligate you in any way, I know that.

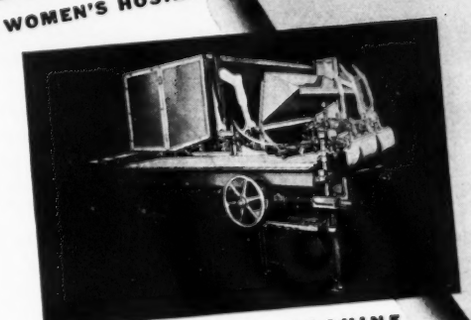
Sincerely,

Joe.

JB:S



MACHINE FOR WOMEN'S HOSIERY



MEN'S HALF-HOSE MACHINE

PROCTOR & SCHWARTZ • INC • PHILADELPHIA

the markets of the manufacturer. New products will be developed. Transportation costs will be studied. Publicity favorable to Philadelphia-manufactured goods will be obtained. We are confident the State and city authorities fully realize the value of this great industry to the economic welfare of the community and that they, too, will co-operate in reducing the cost of doing business in Pennsylvania. It is our purpose to reverse the trend and we hope to have the co-operation of the entire textile industry inside and outside of the Philadelphia Textile Manufacturers' Association," Mr. Bell said.

In commenting on the exodus in recent years of hosiery mills from Philadelphia and Pennsylvania, one of the executives of a hosiery manufacturers' association said that he felt there would be less of this in the future. Among the reasons advanced for this prediction were that legislative bodies in the city and state are adopting a more conciliatory policy and there are indications that the tax burden on Pennsylvania manufacturers will be lowered in the near future. State legislature has been studying the question of whether industry is being driven out of the state for this reason and hosiery manufacturers feel that the results of this survey will bring about some aid to manufacturers. Another reason advanced by hosiery men for this attitude is the recent arbitrated wage schedule placed in effect a few weeks ago in Philadelphia and Reading, in effect placing the entire northern full-fashioned industry on a uniform wage basis. Philadelphia manufacturers feel that if in the near future they are able to install the latest type machinery they will be able to compete successfully with any section of the country in making the better, more expensive and finer grades of hosiery.

◆

FORECAST

(Opinion offered by COTTON'S market correspondent)

Philadelphia, April 16, 1938

Although most knit goods manufacturers have experienced very little business for the spring season and are pessimistic concerning the fall outlook, there are valid reasons for predicting fall will be better, but whether volume for the next half of the year will be enough to bring the year up to a respectable total is a question that few can answer now. Outside influences such as inflationary or business-reassurance steps by the Administration at Washington come foremost in this category and progress in this connection will affect textile fall possibilities drastically. Indications now are that trends affecting business at Washington will henceforth be more favorable.

Leaving Washington out of it, statistically the knit goods markets have made substantial progress in recent months. They have curtailed production down about to shipments and in most instances stocks of goods have been reduced so that many lines of knit goods for fall will have to depend on new production rather than come out of old stocks. There are exceptions to this but in general we are getting our stocks down to a very reasonable and in some cases a low basis which always means the end of the dull period for the mills is not far off; this does not mean a new boom though.

Feeling in the knit goods markets is less pessimistic but not bullish yet. Prices of commodities such as cotton, silk and wool have evidently been resting on bottom and while they may not spurt up, few look for any lower prices furnishing a base for knit goods.

With commodities on bottom and mill operations at a very low level in most instances making manufacturers' overhead large, indications are goods' prices are also on bottom. There is cutting in some lines to book business in a dull market but in general knit goods prices are unchanged and show signs that not much more in this connection can be expected. In fact, there are signs that if buying interest in commodities, yarns, and goods does get under way in the next few months the markets are so thin that a spurt in prices could occur taking goods and yarns into higher price ranges than now. Yarns are selling under cost and spinners will not keep this up forever. Yet there is not confidence enough to buy ahead which means for the next few weeks at least buyers need not fear much higher price levels unless outside developments do this.

Cotton yarn prices have hit new lows this month but this has been selling in a very dull market by only a few that had to sell. In general, prices of these are not going lower and upon any important buying prices will jump 1 to 2 cents. In worsted yarns prices are barely steady but here too nothing much can be expected in the way of reductions; in silk, prices have not changed much and nothing indicates wide swings either way while rayon is steady at the January levels.

The second three months of 1938 will show a slight improvement in volume over the first quarter but nothing in the way of large-scale buying can come much before the middle of the year. In the meantime curtailment will become more general in the primary markets and during the latter part of the year low stocks will harden the selling level of both yarns and knit goods.

The new Federal Administration spending program, while regarded as inflationary by knit goods mill men, has not yet caused any decided change in actual new business, but most agree that a slow but steady improvement in orders is in prospect.

Manning, Maxwell & Moore, Inc., Reports to Jobholders

Manning, Maxwell & Moore, Inc., with plants in Bridgeport, Boston, Muskegon and Jersey City, recently struck a new note in "Industrial democracy". In a local auditorium the thousand-odd employees heard their president, Robert R. Wason, present a detailed report covering the company's operations during the past year.

All facts were presented with complete frankness. With some 60 animated lantern slides, Mr. Wason went into every phase of the operations of the company, which does an annual volume of approximately ten million dollars in the production and sale of industrial equipment including gauges, valves, locomotive and railway equipment, cranes and hoists, precision instruments and mill supplies.

Every employee was informed of the most intimate details of just what happened to each penny of every sales dollar received. He told how much was spent for materials, wages, salaries and profits, and how much of the profits had in turn been re-invested in the plant and equipment. Mr. Wason stated that the men and women who work for a business have just as much right to know these confidential facts as the stockholders who have their money invested in it.

It was brought out that approximately 84 per cent of the company's income in 1937 came from new products developed by the company since 1932, pointing out in this connection that constant study of the needs of the market, together with the necessary engineering development to adapt products to meet changing needs, had made it possible not only to maintain employment, but also to provide more jobs for more people. One slide showed that 45 per cent of the company's Bridgeport plant employees are over 40 years old and that 44 per cent had worked for the company over 5 years. Following this a detailed report for the operations for the past seven years was shown as well as the outlook for the future.

Another innovation in this meeting was the distribution of slips and pencils and the invitation that any and al. questions be asked. At the close of the talk, Mr. Wason, frankly answered each question.

Superior Performance Value in Royersford Needles

The infinite care exercised at every step in the manufacture of Royersford Specially Finished Needles results in a better fabric at a lower cost. All the facilities of our needle department are concentrated on this one product—proving and testing to insure maximum performance value of Royersford Needles in your machines. Leading hosiery manufacturers know what special finishing means in terms of more firsts, fewer seconds and a clearer, sheerer fabric.

The prescription for better knitting

ROYERSFORD NEEDLE WORKS, INC., ROYERSFORD, PA. : : Spring-Beard Needles, Narrowing Points, Picot Points, Lace Points, Welt Hooks, Transfer Points, Stand Points, Bent Points, Dull Points : : Sinkers, Dividers, Jacks, K.O. Bits : : Thread Holders, Carrier Tubes, Welt Bar Hooks, and Eyelets, Strap Cleats, Plate Hooks, Footer Hooks, Strap Hooks : : R.F. Clamps and Straps, Legger Straps, Tension Wires, Snapper Springs, Mend Hooks—for all machines : : *For Glove and Underwear Industries*—Milanese, Tompkins and Tricot Needles, Milanese and Tompkins Guides, Tram Travelers : : Development work. SOUTHERN REPRESENTATIVES: Dave Blevin, Provident Bldg., Chattanooga, Tenn.; Robert Baker, O. Henry Hotel, Greensboro, N.C.

ROYERSFORD NEEDLES

Increase your Business!

There are more sales, more profits to be made on hosiery *DuraBond* Finished!

***Bigger turnover*—the hosiery has been given extra dullness, soft texture, splash-proof, snag and run resistance; added wear, and extra clarity that makes every pair look more sheer. It has been given *all* the qualities that "sell on sight."**

***Better repeat business*—the finish is in for the life of the hosiery, the life is substantially prolonged. Satisfied customers return.**

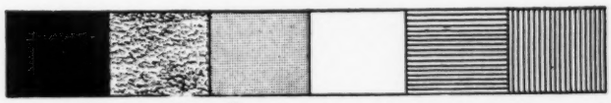
***More profit*—from more sales, made more rapidly. Minimum losses from snags and pulls in handling.**

There's a finish to fit exactly *your* fabric.

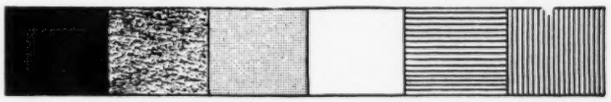
SCHOLLER BROS., INC.

MANUFACTURERS OF TEXTILE SOAPS, SOFTENERS, OILS, FINISHES

COLLINS & WESTMORELAND STS., Phila., Pa. • ST. CATHARINES, Ontario, Canada



Are Your Packages "Color Conscious"?



Color is a strong factor in making or breaking sales yet many ignore color consciousness. In some localities, brown eggs are at a premium while white eggs go begging, and vice versa. A candy manufacturer could not successfully sell boxed candy in a blue package though it sold readily when wrapped in red paper. There are also other instances whereby color has induced or seduced sales.

Are your packages color conscious? Are they attractive without being too flashy? Do they repel instead of impel? Do they convey the right impression? Do they bear a family resemblance to your other packages, giving an impression of uniformity?

Let us analyze your present packages and displays and suggest new designs where need be. May we also show you how our "CO-ORDINATED PACKAGING" will not only create *matched packages* for your wares but also save you money in their production?

OLD DOMINION BOX CO., Inc.

LYNCHBURG, VIRGINIA

Winston-Salem, N. C. — Burlington, N. C. — Asheboro, N. C.
Martinsville, Va. — Charlotte, N. C. — Kinston, N. C.

Old Dominion Paper Boxes

AVONDALE MILLS

Sycamore, Ala. — Sylacauga, Ala.

OFFER THE ADVANTAGES OF LARGE FACILITIES — QUICK SERVICE

THEY CAN READILY SUPPLY ANY TWIST, PLY, OR PUT-UP IN CARDED OR DOUBLE CARDED YARNS FOR KNITTING, WEAVING OR INSULATING IN ALL NUMBERS FROM 3's TO 40's.

Selling Agents:

WATERMAN, CURRIER & CO.
INCORPORATED
BOSTON CHARLOTTE NEW YORK
PHILADELPHIA CHATTANOOGA

Scott & Williams Move General and Sales Offices

Scott & Williams, Inc., and Standard Trump Bros. Machine Co., Inc., 366 Broadway, New York, have removed their general offices to Laconia, N. H., where the main plant of the company is located. The sales offices, demonstration, and sample departments will be moved to sixth floor, 40 Worth St., New York City, on June 1, 1938.

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Royersford Needles Equip Kalio Machines

According to Karl Lieberknecht, Inc., manufacturers of Kalio full-fashioned hosiery machines, all Kalio machines made in America will be equipped with Royersford products, including the new Royersford specially finished needles.

An Eye on the Knitting Mills

A NEW hosiery plant will be established at Aberdeen, N. C., by Thomas A. Oliver, Jenkintown, Pa., which will make full-fashioned hosiery, and which will be equipped totally with the single-unit machines perfected by Dr. Robert Reiner. This will be the first plant in America to be solely equipped with the Reiner machines, it is said. The mill and machinery will represent an investment of about $150,000, according to J. T. Anderson, North Carolina's industrial engineer. The new building will be 60x115 feet and will contain automatic sprinkler system, be air conditioned, and heated with oil.

According to reports from Athens, Tenn., the Chilhowee Hosiery Mills of that city will double the capacity of the plant. Plans and specifications are being prepared. It is understood that the building will be 53x135 feet. New machinery will be installed, and it is said that the mill will be one of the most modern in this country when all improvements are completed. The plant manufactures full-fashioned hosiery. H. A. Vestal is president and general manager.

It is likely that a new hosiery mill will be located at Erwin, Tenn. The Kiwanis Club of that city is investigating conditions and making necessary arrangements for a mill to be moved there from Philadelphia. It is understood that the mill will ship its old machinery, and new machinery of foreign make, to Erwin as soon as negotiations are completed.

At the hosiery plant of Marshall Field & Company, Fieldale, Va., 25 new homes for the operatives are being built at a cost of $1200 each. The company has centered its hosiery operations under one roof.

Hafer Hosiery Mills, Hickory, N. C., has competed an addition to the plant, which provides additional space for the knitting department.

The Laughlin Full-Fashioned Hosiery Mills, Randleman, N. C., is expected to be in operation shortly.

Robert Jackson, former superintendent and manager of National Weaving Mills, Lowell, N. C., will be the manager of a new full-fashioned hosiery mill to be built at Gastonia, N. C. J. M. Hatch is also interested.

According to J. S. Reed, Crossville, Tenn., a new mill to manufacture sweaters and underwear will be built in that section, though details have not been worked out yet.

Erwin M. Williams and J. Francis Verreault are managing the new John-Massey Company mill in Valdese, N. C., which is specializing in infants' and children's hose.

Crown Hosiery Mills, High Point, N. C., plan to erect a hosiery mill as a branch plant at Liberty, N. C. $200,000 worth of machinery will be installed and 210 persons will be employed.

Machinery in the Welwood Silk Throwing Mills, McMinnville, Tenn., which closed last fall, has been dismantled and moved to Murfreesboro for storage.

It is reported that James F. Neilds, Jr., formerly manager of the Ware Valley Manufacturing Company and now employed temporarily by the E-Z Mills, will establish his own knitting mill this summer.

Granada Knitting Mills, Inc., have been organized at Indianapolis, Ind. The plant will manufacture silk hosiery.

Marum Knitting Mills, Lawrence, Mass., is a new company that will produce men's socks, women's sport hose, and other knit specialties.

Bambeck Knitting Mills, Philadelphia, Pa., have selected Milton, Fla., as the site for a knitting mill.

Fayetteville (N. C.) Knitting Mills, recently organized, have ordered a number of Einsiedel-Reiner high speed machines through Robert Reiner, Inc., Weehawken, N. J.

◆

Summer School in Textiles at M. I. T.

A summer session program in principles of textile analysis is again announced by the Massachusetts Institute of Technology, Cambridge, Mass. for six weeks beginning July 25, 1938. The work will be given in the textile laboratories under the direction of Professor E. R. Schwarz and will include lectures, demonstrations illustrated by experiments, lantern slides, and moving pictures, together with laboratory exercises in physical analysis of textiles, textile microscopy, and principles of fabric structure.

It is offered for the benefit of laboratory technicians, teachers of household economics, students fom textile schools and others interested in textile research and is a single comprehensive program. The facilities of the laboratories have been substantially increased and equipment has been rearranged for more efficient class use. So far as possible the material will be presented in a manner to be of interest and value to the teacher of these and allied subjects, to the laboratory technician, to the executive who must interpret research results for the benefit of his organization, and to the student who seeks an up-to-date orientation course in the physical and optical analysis of textile materials of all kinds.

In the field of microscopical analysis the techniques for such determinations as cross-sectioning, refractive indices, wool quality, cotton maturity in polarized light, swelling and disintegration of fiber structure, yarn twist, crimp, thickness and density, fabric porosity, sett and weave, photomicrography (motion picture, stereoscopic, direct color) and the relationship of microscopic research to physical and chemical research in general will be included.

In the study of physical analysis of textiles, tensile, bursting, tearing, seam, and compressive strengths, elasticity, plasticity, torsional and flexural rigidity, drape, abrasive resistance, moisture effects, repeated stress, air and water permeability, heat transmission, twist, fastness to laundering, shrinking, perspiration, light and crocking, variable factors influencing test results, design of testing equipment, and standard laboratory practice, will be considered.

TRENDS---THE YARN MARKETS

Only Minor Price Changes in Yarns. Poundage During March and Early April Very Disappointing with Seasonal Expansion Less Than Expected. Many Yarns Selling for Less Than Cost. Spinners' Curtailment Severe.

Philadelphia, April 16, 1938

SMALL DEMAND FROM THE YARN CONSUMING TRADES has brought about a very undesirable condition in most types of yarns—where yarn producers are selling below cost. This is apparent in cotton and worsted especially, where in the former, prices current are about 2 cents under cost and in worsted spinners claim even greater losses. In rayon, prices are low and no doubt unprofitable but definite news on this score must wait for the financial statements of such firms, those for the first quarter indicating that with low prices and poor demand only losses can be expected. Silk prices have not changed much this year with the spring hosiery demand being larger than early this year but not what knitters had expected. They have been buying silk slightly more actively. What effect the new spending program of the Administration will have on these markets cannot be said at this time. Most agree this will help but the same ones are going to wait until consumer interest creates demand for their raw materials; there is not going to be another inflationary boom in prices if the yarn trades stand by their present attitude. One experience in this was enough.

Cotton Yarns

There has been very little change in price of cotton now and a month ago, but notwithstanding this and also that they were very small previously, spinners' margins have narrowed more and disappeared in many instances. Spinners are now at a point where it is more profitable for them to close their mills than to take the business now offered, prices being so far under cost. For example, spinners have declared that while 10s carded cones have sold here down to 16½ cents which was the bottom reached last year when cotton was a cent cheaper, their cost is around 18 cents.

In weaving yarns there have been sales down to 19 cents basis 20s two-ply warps which is a little under the 1937 low point. Spinners assert that their cost is at least 2 cents over this selling price. Yet the volume of business that such price cutting brings forth makes this policy for spinners even more unwise. It only ruins the market for the others. In this connection a hopeful sign is that more spinners are curtailing, even more so than they did in the previous depression, six years ago. Many spinners say this period is a worse one for spinners than the first depression of the present Administration. Wages and taxes now are higher and more inflexible making it impossible for spinners as well as other manufacturers to reduce costs.

Spinners in many instances have been working to keep their help working part time at least but the point has been reached where selling agents here are beginning to advise spinners that until demand improves it will be the best thing for all concerned, labor too, if the mills close down. Selling below cost will in the end hurt employees as well as employers and more are realizing that a time comes when it is better for all concerned to stop accepting any price that buyers care to make. In contrast to the weakness in carded and combed yarns, mercerized counts have been rather firm and knitters report that whereas formerly they were able to buy several cents under the 63-cent basis for 60s two-ply, at present they are unable to do better than one cent under that price. A disappointing development within the last week has been a contraction in specifications on old contracts from weavers but at the same time there has been a minor upturn in takings on old knitting yarn contracts, coming mainly from underwear mills up the state that are seasonably busier turning out polo shirts.

Silk

Demand for raw silk has been slightly more active reflecting the pre-Easter upturn in hosiery mill operations as they got out their new lines. Hosiery manufacturers that consume the bulk of this commodity in this country, continue to buy cautiously and only to cover the silk required for their goods orders. Demand from the weaving trades has been very quiet although total deliveries to American mills in March were approximately 10 per cent larger than those for February. A slight drop in this drop trend is indicated for the present month, hosiery manufacturers going on a shorter operating schedule as they completed their pre-Easter orders. Orders are being booked every day but they are for immediate or very near-by delivery, dealers finding few willing to place orders two or three months in advance any more.

Total takings of raw silk by domestic mills in March were 34,884 bales compared with 30,260 bales in February and 39,934 bales in March, 1937. March imports were 27,376 bales and stocks at the end of the month had declined to 36,326 bales compared with 43,834 at the end of February. For the last nine months total takings by domestic mills were 286,920 bales as against 372,120 for the comparable nine months ended March, 1937. Deliveries for the current eight-month period were the lowest for any similar period since 1923 to 1924.

Rayon Yarns

Although rayon yarn manufacturers began curtailing production early this year, their stocks were larger at the end of February than a month previous. In view of this, further steps in this connection have been announced within the last few weeks and curtailment at present in this industry is more severe than seen for a number of years. Up to a year ago, it was not a question of curtailing, but rather how these yarn manufacturers could produce enough to take care of their customers' requirements. To meet such a situation substantial plant expansions have been started in the last year but in view of the market situation at present, these are not being pushed and wherever possible are being delayed. Rayon yarn shipments during March were 9 per cent greater than during February, while yarn stocks held by producers at the end of March amounted to a 3.3 months' supply as compared with a 3.0 months' supply at the end of February. In commenting on the decline in new business, the *Rayon Organon* says "Not only are most plans to expand existing facilities being held in obeyance, but another trend also is noted. With yarns selling at 63 cents per pound as it was last fall, most of the spindles to be installed were to be new or additional spindles but with today's yarn price at 54 cents per pound, there is a tendency to use these new spindles as replacement spindles."

Worsted Yarns

While the wool top futures market is slightly higher than a month ago, no corresponding trend has been apparent in worsted yarns over the month. In fact, manufacturers are able to buy both weaving and knitting yarns at lower prices ranging from 2½ to 5 cents lower than a month ago. This lowering of yarn prices at a time when the raw material market was holding steady reflects the endeavor of spinners to sell in a very unreceptive market. Outerwear manufacturers have been unable to book spring business as well as 1938 swim-suit orders and at the same time have found it impossible to secure early fall business. In view of this, a between-season lull is looked for until fall goods orders begin to arrive. There are no indications at present that manufacturers are going to buy yarns in advance of their goods orders but a change in attitude may develop in this connection before fall should the inflationary implications of the Federal spending program become effective.

Knitting yarn spinners in this section have been operating around 30 per cent and schedules of the manufacturers have not been much higher than this. Local knitters complain that outerwear manufacturers in other parts of the country, including the South, have named lower prices on fall lines of knit goods than they can meet. Several have for this reason been trying to force yarn prices even lower to permit them to name correspondingly low fall prices on sweaters. Bathing suit manufacturers, reporting that the 1938 season in worsted knitted lines will only be about one-third of normal, believe they see signs of a return in 1939 to this type swim suit.

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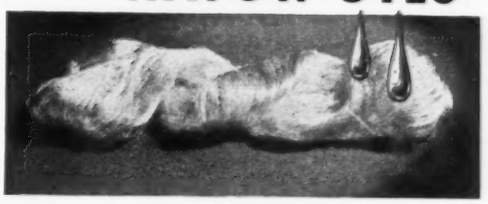

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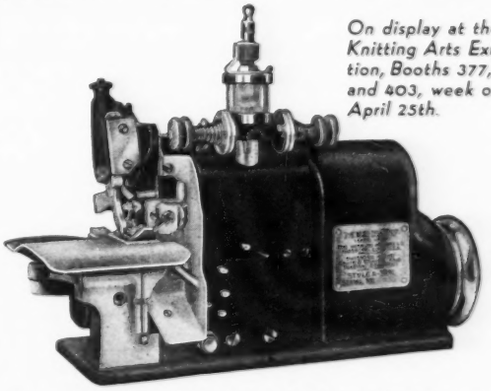

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T- "Eliminating 'Washboard' Effects in Manufacturing Ringless Hosiery", by Henry W. Hoffman. A 4-page discussion for 20 cents.

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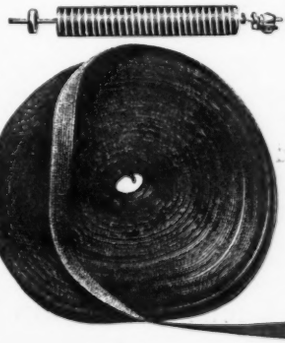

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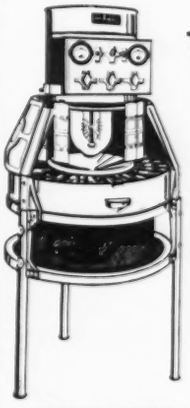

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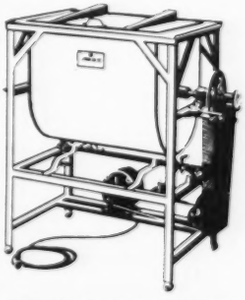

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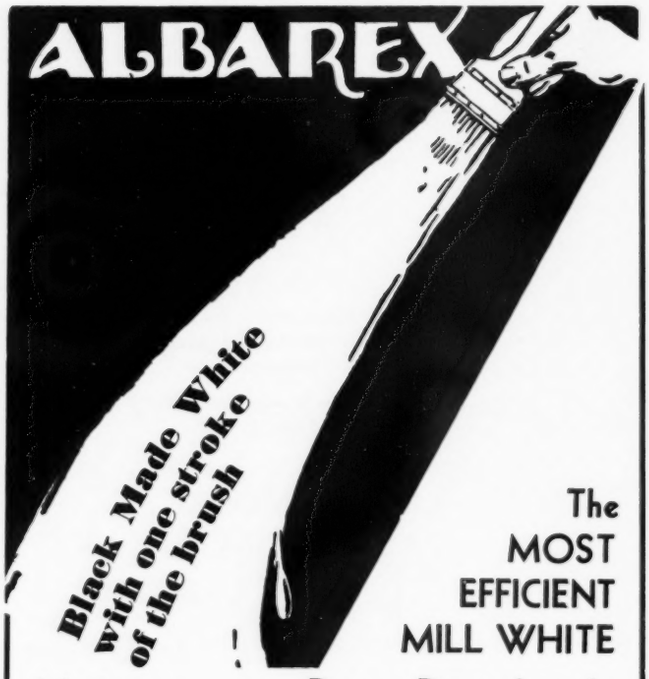

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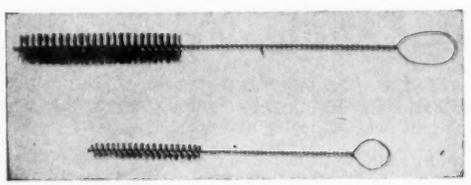

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QUALITY · HYGIENIC · SANITARY · PERFECTION · ATLANTA

MANUFACTURING CHEMISTS
Atlanta, Ga.--Established 1896--Dallas, Texas

Kali

Products for all textile Purposes

CUT RAYON STAPLE, ACETATE STAPLE and various combinations of these fibres should be conditioned with HYDROXY RAYSPINOL to produce good spinning.

SPUN RAYON, SPUN ACETATE and various combinations of these staples need the proper size on the warps, one which weaves well and washes out easily.

HYDROXY SIZE will give you these results.

Let Us Help You.

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Fully 25% of All Cotton Textile Spindles in the United States are Operated on the Loper System.

Ralph E. Loper Co.

INDUSTRIAL ENGINEERS

Specialists in Textile Costs Over 25 Years

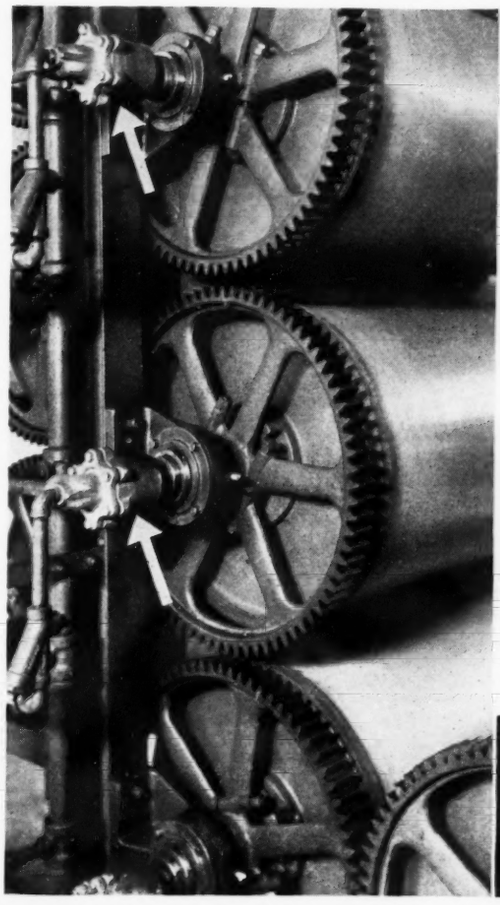
FALL RIVER, MASS. GREENVILLE, S. C.

"Smoother than Grease" Since 1890

20 years without a drink—

ARGUTO OILLESS BEARING CO.

Wayne Junction, Philadelphia, Pa.



GONE
The packing, oiling and adjusting of stuffing boxes

HERE
The stuffing box that changes the whole picture

BECAUSE the escape from stuffing box troubles was long overdue, the acceptance of the Johnson Rotary Pressure Joint, during the few years it has been on the market, has been nothing short of amazing. Thousands of joints have been installed on existing machines — all prominent manufacturers of dry cans, slashers and Sanforizers are using them as standard equipment or furnishing them on specification . . . why?

There were two phases to this acceptance. First came the joint itself—a joint that was truly packless, self-lubricating, self-adjusting, self-aligning —a joint that immediately proved its ability to save time, power, maintenance—that has today shown its ability to outlast ordinary stuffing boxes many times over.

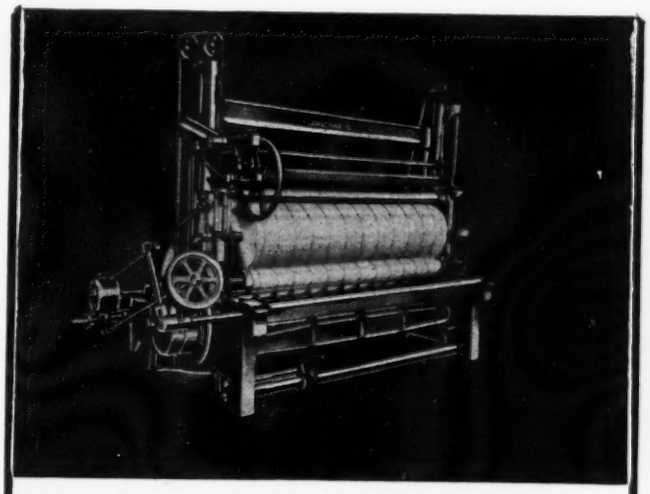
Next came the range of designs that offered better, more efficient ways of removing the condensate, air and gases from drums — the Johnson Joint for Syphon Pipe Drainage — the rotary syphon pipe arrangement (Johnson "Speedheet" System) for draining the large slashers—the complete range of special and standard designs that have speeded up and improved dry can performance.

With the Johnson method there is no waiting for rolls to heat. With air and gas removed, as well as condensate, rolls stay hotter—speed and production is increased as much as 25%.

Ask for latest bulletin showing types of joints and dollar-saving applications.

THE JOHNSON CORPORATION, 815 Wood Street, Three Rivers, Michigan

Johnson
Rotary **PRESSURE JOINT**

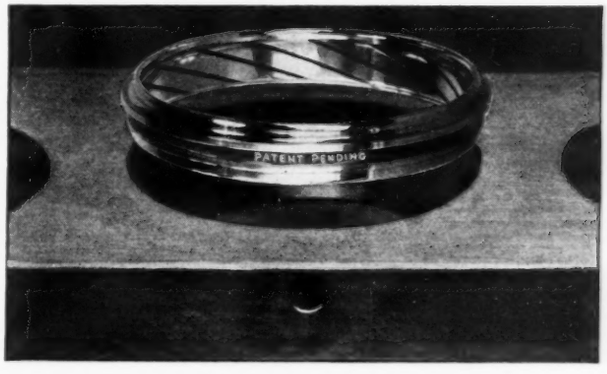


LIGHT GAUZE OR HEAVY DUCK CAMACHINES WIND THEM BETTER

The slitting and roll-winding of textiles on CAMACHINES offer opportunities for such marked savings that no manufacturer or converter can afford to overlook them. The Cameron score-cut method of slitting produces rolls with straight, clean-cut edges and the winding action is so perfectly controlled that there is no stretching or distortion of the web. This makes further processing more economical and insures a higher quality of finished product.

Send for literature.

CAMERON MACHINE COMPANY
61 Poplar St. BROOKLYN, N.Y.



No change in rail . . . big change in RESULTS!

The Multiple-groove ring steps "right into the shoes" of ordinary twister rings, and with what a difference in results! One greasing does for several doffs. Traveler life often doubled. Speeds improved, of course. Made in U. S. A. only by DIAMOND FINISH.

WHITINSVILLE (MASS.) SPINNING RING CO.
DIAMOND FINISH
Makers of Spinning and Twister Rings since 1873

Southern Representative: H. ROSS BROCK, Lafayette, Georgia
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"TERMACO"

is THE WORD for

QUALITY

IN

CARD ROOM BOBBINS
CREEL, TWISTER, AND WARP SPOOLS
SKEWERS
CLEARER BOARDS
SCAVENGER ROLLS
ETC.

The Terrell Machine Co., Inc.

Charlotte, North Carolina

A Definite Step Forward!

IN PERFORMANCE AND DESIGN OF LONG DRAFT EQUIPMENT

- PARAMOUNT EFFICIENCY
- MAXIMUM SIMPLICITY
- HIGHEST ECONOMY
  in maintenance and purchase

The Improved

CASABLANCAS

LONG DRAFTING SYSTEM

—IN THEORY:-

ACKNOWLEDGED THE BEST

—IN PRACTICE:-

THE MOST WIDELY ADOPTED

AMERICAN CASABLANCAS CORP.

Johnston Bldg. **Charlotte, N. C.**

SOLE LICENSEES IN U. S. A.

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equipped with modern machinery and a staff of competent workmen, solicits, thru this publication, a trial order on your printing needs.

We have built a reputation that is known over the entire South by our special attention to the minutest detail.

We are more than ready to answer any question that relates to your printing problems.

Write us and let us quote you on anything from a postal card to a full bound book.

The A. J. Showalter Co.

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DALTON **GEORGIA**

3000 ROOMS
WITH BATH

OTTO K. EITEL
Managing Director

THE STEVENS CHICAGO

"AMERICA'S GRAND HOTEL"

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If it's worth sending—it's worth protecting. Your samples, catalogs, and price lists will be protected in our envelopes.

They are manufactured to meet your particular requirements from tough kraft paper—extra tight seams for unfailing service—metal clasp or string lock flaps.

Write us for samples and prices. We are glad to show you how to save on your purchases, and there's no obligation.

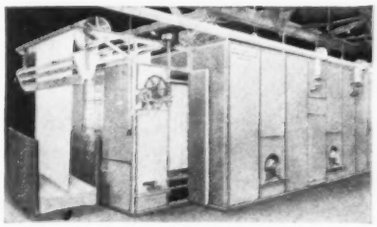
ATLANTA ENVELOPE COMPANY

505-11 Stewart Avenue, S.W.

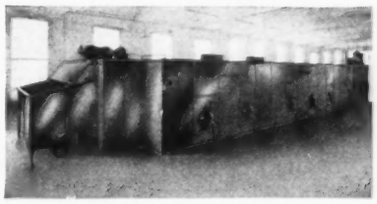
ATLANTA, GEORGIA

DRYING AND CONDITIONING

AT HIGH-SPEED AND LOWEST COSTS



New "Hurricane" Automatic **LOOP DRYER** with Turning Poles, permits higher air velocities and pressures, without disturbing the fabric. Greatly increases drying speed, doubles capacity, and cuts costs by 33⅓ to 50%!



New "Hurricane" **STOCK DRYER** installed in a leading Eastern mill, has increased production from 1200 lbs. per hour to 2500 lbs. 100% more output with no extra labor!

ALSO NEW "HURRICANE" TENTER DRYERS
NEW HI-SPEED VACUUM EXTRACTORS
CLOTH CARBONIZING EQUIPMENTS

THE PHILADELPHIA DRYING MACHINERY CO.
3331 Stokley Street, Philadelphia, Pa.
DRYERS for ALL Textiles from Raw Stock to Finished Fabrics

BOSSON & LANE, INC.

Manufacturing Chemists
Established Jan. 1, 1895
Works and Office, Atlantic, Mass.

HIGH GRADE CASTOR OIL PRODUCTS
Sulphonated-Saponified
Soluble Oils Para Soap Oil
Turkey Red Oil Castor Soap Oil
Soluble Pine Oil B & L Bleaching Oil

PENETRANTS
BINDOL - ALPHASOL
Bleach Softener CSO,
Finishing Sizings and Softeners
VICTROLYN,
the economical assistant in warp sizing.
Penetrating, Lubricating and Wholly Efficient.

B & L BLEACHERS' BLUINGS AND VIOLET TINTS

GOOD MONEY VALUES--FREEDOM FROM WORRY

Southern Representative:
J. Frank Richardson, Jr., Tryon, N. C.

For Quality— Go "TERMACO"

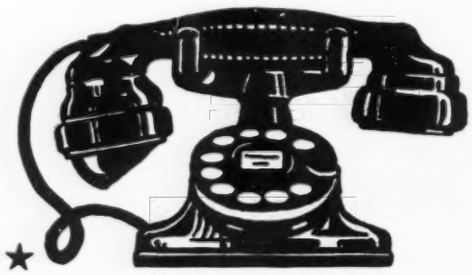
CARD ROOM BOBBINS
CREEL, TWISTER, AND WARP SPOOLS
SKEWERS
CLEARER BOARDS
SCAVENGER ROLLS
ETC.

The Terrell Machine Co., Inc.

Charlotte, North Carolina

CONVENIENT

as your



The guest who occupies one of the big, new rooms (recently redecorated, newly furnished) in Hotel McAlpin is "on the spot" . . . and we mean, the most convenient spot in New York. Few hotels can boast of the central location of the McAlpin . . . it's "nearer than anything to everything". As you reap the advantages of its time-and-money-saving location, you doubly enjoy the comfort, fine service and economy of Hotel McAlpin. On your next visit, may we expect you?

JOHN J. WOELFLE, Mgr.

★TELEPHONE

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"The Center of Convenience"

Broadway at 34th Street

NEW YORK

ROOMS WITH BATH FROM

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. . give *good* service as a matter of course; they are popular because of their *friendly* service, which combine to make *better* service . . .

You will enjoy living in Dinkler operated hotel

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★ **The O. HENRY** GREENSBORO
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★ ***The TUTWILER** BIRMINGHAM

** Air conditioned bed rooms!*

MONTGOMERY **The JEFFERSON DAVIS** ★
NEW ORLEANS **The ST. CHARLES** ★
NASHVILLE * **The ANDREW JACKSON** ★

***Air conditioned bed rooms!*

DINKLER HOTELS CO. INC.
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OPERATING 3000 ROOMS IN SOUTHERN HOTELS

Write Your Own Figure!

$_____

The Walker method of periodic power consumption tests enables you to test your machinery in a minute's time while in operation. Wasted power shown in these tests indicates hidden defects that may lead to serious breakdowns, enabling you to make minor adjustments to prevent major losses in production time. Necessary equipment is inexpensive, often paying for itself immediately after being put into use.

Maintenance and power costs plunge downward when you use the Walker method of periodic power consumption tests for your machinery. Start a savings account in money, time, and effort that will reach pleasing proportions in a short time by investigating this proven method today.

A postcard will bring complete information.

WALKER ELECTRICAL CO.
Atlanta, Ga.

STOP *the bother of changing* Chaser Dies

RIGID

No. 65R Threads 1" to 2" Pipe with ONE set of Chasers

Instead of 16 chaser dies to lug around, to risk losing, to waste valuable time changing, this threader has only 4 — and they stay in the threader.

A quick shift of the setting post and you're ready to cut perfect threads on 1" to 2" pipe, any metal — a convenience that runs into real money saving.

Like many thousands of users, you go for the new style workholder that clicks to pipe size with a twist of the gauge ring and tightens with one screw. No bushings to bother with.

Plenty of other efficiency features in this rugged modern threader. You get real satisfaction out of owning and using this RIGID 65R. Try one at your Jobber's—buy it for better, faster, easier threading.

THE RIDGE TOOL CO., ELYRIA, O.

Makers of the Famous RIGID *Wrench*

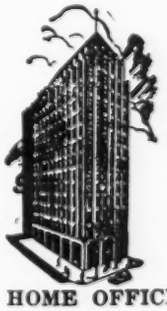
RIGID PIPE TOOLS

YOU NEED

Protective

EMERGENCY PLAN

Death, sickness, accidents, surgical operations and hospitalization do not cost Management anything where Protective Life Emergency Plan is installed. Does away with "passing the hat". Protects entire family. Many thousand textile workers now enjoy its advantages. Additional information gladly furnished.



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LIFE INSURANCE CO.
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BIRMINGHAM, ALABAMA.

THE PURE OIL CO.
PURE THREE POINT LUBRICATION
A COMPLETE LINE OF INDUSTRIAL PETROLEUM PRODUCTS
CHICAGO U.S.A.

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	Per Inch		Per Inch
1 inch	$5.00	13 inches	$4.20
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Advertisements set "Want ad style." Positions wanted .05 word per insertion. Minimum charge $1.00 per insertion. Cash with order. All other classifications .10 word per insertion. Minimum charge $2.00 per insertion. Advertisements of equipment, for sale, rent or wanted and professional cards are accepted at display rate only.

Box number address care of COTTON, Grant Bldg., Atlanta, Ga., count as eight words.

Do You Need a Southern Representative?

Young man who has been calling on the hosiery, underwear and cloth finishing mills for 13 years as Southern Manager for prominent company desires to make new connection. Has many friends among the principals of the mills and can furnish best of references. Address SPR, c/o COTTON, Grant Bldg., Atlanta, Ga.

POSITION WANTED

Textile school graduate able to analyze and calculate weight of Pile, warps and fillings and reproduce two shuttle pile fabrics; also able to set up and start two shuttle plush looms and do all figuring for gears, pile and picks. 15 years practical experience. Would like position as overseer of weaving department or in designing department. Address Box 443, c/o COTTON, Grant Bldg., Atlanta, Ga.

WANTED

Salesman with ready contacts in Georgia and Alabama for line of dyestuffs. Write giving experience, salary expected, etc. Replies treated confidentially. Write to Box No. 444, care COTTON, Grant Bldg., Atlanta, Ga.

Paul B. Eaton

PATENT ATTORNEY
1408 Johnston Bldg., Charlotte, N. C.
514 Munsey Bldg., Washington, D. C.
Former Member Examining Corps
U. S. Patent Office

POSITION WANTED

As superintendent or manager. Have had 20 years experience on cotton, silk, and rayon; bedspreads, handkerchiefs, broadcloth, etc., Can furnish best of references and will go anywhere. Address Box 441, care of COTTON, Grant Building, Atlanta, Georgia.

FOR RAPID LIQUIDATION

For Rapid Liquidation of textile plants consult the S. B. Schwartz organization. We are the exclusive machinery suppliers to many large textile firms in Latin American countries. For that reason, our outlet for good, used American machinery is unexcelled. For years we have been engaged domestically in the appraisal, liquidation, purchase and sale of textile mill properties.

S. B. SCHWARTZ
TEXTILE ENGINEERS—APPRAISALS AND LIQUIDATIONS
1050 CONSTANCE ST., NEW ORLEANS, LA., U. S. A.

"FULL-FASHIONED KNITTING PRACTICES"

A new 200 page book of interest and value to executives, managers, boarders and learners. Reading it is like sitting down at a round table and discussing your problems with other mill men throughout the coun ry —such problems as cost systems, sleazy knitting, needle-breakage, press-offs, lubrication, mismatching leg and foot short lengths, drop stitches on seamers, selecting colors, boarding hosiery, etc.

You can get this fine book, attractively bound in heavy cover, with a 3-year subscription to COTTON, 36 issues in all, for only $2.50. If you are already a subscriber, expiration date of your subscription will be advanced three years.

COTTON
GRANT BLDG., ATLANTA, GA.

YOUR ADVERTISEMENT IN THIS SECTION

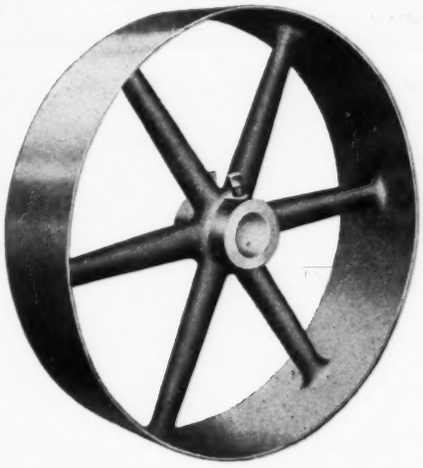
will produce results at small cost. Do you desire a position? Do you desire a good man to fill a vacancy in your mill? Do you desire your business or professional card placed before the textile industries?

Why not try an advertisement in this section of COTTON? Its 12,500 copies per month reach the textile executives, superintendents and heads of departments throughout the industry.

Note the rates above and send in your advertisement today.

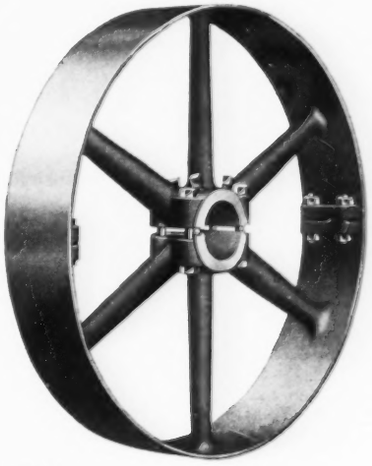
COTTON, Grant Bldg., ATLANTA, GA.

CAST IRON PULLEYS



MACHINE MOLDED

Well Proportioned
Accurately Turned
Nicely Balanced



Standard Single or Double Belt, Solid or Split Pulleys
Tight and Loose Pulleys—Clamp Hub Pulleys—Flange Pulleys
Solid Web Center Motor Pulleys—Dove-Tail Joint Split Pulleys
Conveyor Pulleys—Ball Bearing Loose Pulleys
Friction Wheels—Fly Wheels—Balance Wheels

GOLDENS' FOUNDRY & MACHINE CO., COLUMBUS, GA.

"We have furnished more Complete and Partial Pulley and Shafting Equipment to Cotton Mills than any other manufacturer in the United States."

THE FINANCIAL ANGLE OF WATER SERVICE

When you put your money into a pump it's there—for good or bad. Almost any shop can make a pump so that it will work in some way. But textile mills want pumps that will work in the best possible way for the longest time at the lowest over-all cost. They want to be assured of receiving standardized parts that will fit when needed. That's the financial angle as we see it from the owner's viewpoint.

Engineering and production procedures in Pomona Pump Manufacturing Plants are dictated by this viewpoint. They involve correct design of every detail, the use of the best currently available materials for each specific purpose, adequate and modern plant facilities and expert workmanship.

POMONA PUMP COMPANY

Manufacturing Plants: Pomona, Calif., St. Louis, Mo.
Branch Offices: New York, Chicago, Los Angeles, San Francisco

POMONA TURBINE PUMPS

Preparedness against every contingency is the price of safety. No business seeks trouble, yet unfenced industrial property is constantly menaced by invasion and vandalism. One sure way to prevent trespass, to safeguard buildings and contents is to surround your property with a Stewart Non-Climbable Chain Link Wire Fence . . . a fence that says "STOP" and enforces that emphatic command. If you are interested in getting the maximum value in assured protection, in structural superiority, in long life and trouble-free service, check Stewart features against all others and learn why Stewart is the leading industrial fence, the logical choice of keen buyers.

Send for catalog and complete information. Sales and Erection Service in principal cities.

"World's Greatest Fence Builders Since 1886"

Stewart IRON and WIRE **FENCES**

The STEWART
IRON WORKS CO., Inc.
594 Stewart Block
Cincinnati . . . Ohio

Index of ADVERTISERS

The Advertisers' Index is published as a convenience, and not as a part of the advertising contract. Every care will be taken to index correctly. No allowance will be made for errors or failure to insert.

A

Albany Felt Co. 172
Aldrich Machine Works 32
Allis-Chalmers Mfg. Co. 110
American Casablancas Corp. ..176
American Moistening Co. 170
American Monorail Co. 10
American Yarn & Processing Co. ..... *
Appalachian Coals, Inc. 43
Arguto Oilless Bearing Co. ...174
Armstrong Cork Products Co...107
Arnold Hoffmann & Co., Inc... 44
Ashworth Bros., Inc. ..... *
Associated Business Papers, Inc. 46
Atlanta Envelope Co. 177
Atlas Electrical Devices Co. ..169

B

Bahnson Co. 126
Barber-Colman Co. 121
Barkley Machine Works 160
Blickman, Inc., S. 130
Borne, Scrymser Co. 171
Bosson & Lane, Inc. 177
Boston Woven Hose & Rubber Co. .....54 and 55
Boyle Co., Inc., A. S. 134
Brinton Co., H. 154
Brown Co., David ..... *
Brown Instrument Co. 8
Buffalo Electro-Chemical Co., Inc. ..... *
Burroughs Adding Machine Co. *
Butterworth & Sons Co., H. W. 35

C

Cameron Machine Co. 175
Champion Paper & Fibre Co. . 53
Ciba Company 168
Classified Ads 180
Cleveland Tramrail Division ..118
Clinton Co. 126
Clover Leaf Mfg. Co. 172
Cole Mfg. Co., R. D. 137
Colgate-Palmolive-Peet Co. ... 17
Columbia Alkali Corp. 34
Commercial Credit Co. 16
Continental-Diamond Fibre Co. *
Corn Products Sales Co. 171
Crane Co. ..... *
Crompton & Knowles Loom Works 3

D

Dary Ring Traveler Co. 173
Debevoise Co. ..... *
Diehl Mfg. Co. 58
Dodge Mfg. Corp. 125
Dommerich & Co., L. F. 4
Drake Corp. 37
Draper Corporation 1
Dronsfield Bros., Ltd. 169
Du Pont de Nemours & Co., Inc., E. I., Dyestuffs Division ..... *
Du Pont de Nemours & Co., Inc., E. I., Fine Chemicals Division 41
Du Pont de Nemours & Co., Inc., E. I., Finishes Division 45
Du Pont de Nemours & Co., Inc., E. I., Grasselli Chemicals Dept. 48
Du Pont de Nemours & Co., Inc., E. I., R. & H. Chemicals Dept. ..... *
Duro Metal Products Co. ..... *

E

Eaton, Paul B. 180
Economy Baler Co. 126
Emmons Loom Harness Co. ... 22

F

Fafnir Bearing Co. ..... *
Fletcher Works, Inc. ....Inside Back Cover
Foster Machine Co. ..... *
Fostoria Pressed Steel Corp... *
Foxboro Co. ..... *
Franklin Process Co. ....Inside Front Cover

G

Gastonia Brush Co. 172
Gastonia Roller, Flyer & Spindle Co. 172
Gates Rubber Co. ..... *
Gaylord Container Corp. ..... *
General Dyestuff Corp. 19
General Electric Co., Lamps .. 47
General Electric Co., Refrigeration ..... *
General Electric Co., Motors.. *
General Electric Vapor Lamp Co. 36
Georgia Power Co. 42
Gill Leather Co. 113
Goldens' Foundry & Mch. Co..181
Goodyear Tire & Rubber Co...105
Graton & Knight Co. 14
Grinnell Co., Inc. ..... *
Gulf Oil Corporation 7

H

H & B American Machine Co.. *
Haas-Miller Corp. 167
Henderson Foundry & Mch. Wks. 50
Hermas Machine Co. ..... *
Hetherington & Sons, Inc., John 169
Hotel Atlanta Biltmore 178
Hotels Dinkler 178
Hotel McAlpin 178
Hotel Stevens 176
Houghton & Co., E. F. ..... *
Howard Bros. Mfg. Co. 18
Hubinger Co. 168
Hunter Machine Co., James .. 30
Hurley-Johnson Corp. 170
Hyatt Bearings Division ..... *

I

International Nickel Co., Inc.. *

J

Jacobs Graphic Arts Co. 52
Johnson Bronze Co. 115
Johnson Corporation 175
Johnson Service Co. ..... *
Johnson Co., Oliver 170

K

Kaumagraph Co. 38
Kali Mfg. Co. 174
Keever Starch Co. 173

L

Langevin, George F. ..... *
Laurel Soap Mfg. Co. 167
Lawlor Co., S. C. 174
Link-Belt Co. ..... *
Loper Co., Ralph E. 174
Lunkenheimer Co. 24

M

Manhattan Rubber Mfg. Co. Division 49
Meese, Inc. ..... *
Merrow Machine Co. 167
Mill Factors Corp. 130
Moccasin Bushing Co. ..... *
Moore Paint & Oil Co., Leland 169
Morehead Mfg. Co. ..... *

N

National Oil Products Co. ... *
National Ring Traveler Co. ...134
New England Bobbin & Shuttle Co. 134
New York & New Jersey Lubricant Co. 132
North, Inc., Frank G. 134
North Carolina Industrial Bureau ..... *

O

Old Dominion Box Co. 164

P

Page Fence Association 132
Parks-Cramer Co. 29
Penick & Ford, Ltd., Inc. 39
Pennsylvania Salt Mfg. Co. ... 27
Philadelphia Drying Mchry. Co. 177
Philadelphia Quartz Co. ..... *
Pittsburg Plate Glass Co. ... 25
Pomona Pump Co. 181
Power Transmission Council .. *
Protective Life Insurance Co..179
Proctor & Schwartz, Inc. .... 137 and 161
Premier Pabst Sales Co. ..... *
Pure Oil Co. 180

R

Reeves Pulley Co. ..... *
Reliance Electric & Eng'g Co. *
Republic Rubber Co. 26
Republic Steel Corp. 60
Ridge Tool Co. 179
Robert & Company ..... *
Rochester Eng'g & Centrifugal Corp. 152
Rockwood Mfg. Co. ..... *
Rohm & Haas Co. ..... *
Royce Chemical Co. ...Back Cover
Royersford Needle Works, Inc..163

S

S. K. F. Industries, Inc. 21
Saco-Lowell Shops 9
Scholler Bros., Inc. 164
Schwartz, S. B. 180
Scott & Co., Henry L. 167
Scott & Williams, Inc. 140
Selig Company 174
Seydel-Woolley & Co. ..... *
Shell-Union Oil Corp. 56
Showalter Printing Co., A. J...176
Sirrine & Co., J. E. ..Front Cover
Skybryte Co. 119
Smith Drum & Co. ..... *
Solvay Sales Corp. 170
Sonoco Products Co. 122
Southern Sizing Co. 173
Staley Mfg. Co., A. E. .12 and 13
Standard Oil Co., Inc., of Kentucky 33
Steel Heddle Mfg. Co. ..... *
Stein, Hall & Co., Inc. 23
Stewart Iron Works 181
Stodghill & Co. 126
Sturtevant Co., B. F. ..... *

T

Taylor Instrument Companies. 28
Terrell Machine Co. ..176 and 177
Texas Co. 2
Textile Apron Co. 171
Textile Banking Co. 109
Textile Machine Works 151
Textile Recorder Mchry. & Accessories Exhibition, Ltd. ..170
Three-In-One Oil 134
Torrington Co. ..... 157 and 158

U

Union Special Machine Co. ... 6
Universal Winding Co. 11
U S Bobbin & Shuttle Co. ... *
U. S. Ring Traveler Co. 20
U. S. Rubber Products, Inc. .. 40
U. S. Testing Co., Inc. ..... *

V

Veeder-Root Inc. ..... *
Victoria Paper Mills Co. .... *

W

Walker Electrical Co. 179
Wallerstein Co., Inc. ..... *
Want Ads 180
Waterman Currier & Co., Inc..164
West Point Foundry & Mch. Co. 15
Westinghouse Elec. & Mfg. Co. (Motors) 51
Whitin Machine Works 5
Whitinsville Spinning Ring Co. 175
Wildman Mfg. Co. 148
Wolf & Co., Jacques 31

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